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INFLUENCE OF ULTRA INTELLIGENCE  
UPON  
GENERAL CLARK AT ANZIO

A thesis presented to the Faculty of the U.S. Army  
Command and General Staff College in partial  
fulfillment of the requirements for the  
degree

MASTER OF MILITARY ART AND SCIENCE

by

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situation after Allied forces were ashore at Anzio.

As background, the study examines briefly the origin of Ultra and how this information was processed as well as disseminated during World War II, in Italy. The Allied military strategy, as it evolved from Prime Minister Churchill and President Roosevelt, is also briefly described to place Anzio in perspective with the upcoming invasion of France (Operation Overlord) and establish the strategic situation that influenced decisionmaking in the Mediterranean theater.

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The opinions and conclusions expressed herein are those of the student author and do not necessarily represent the views of the U.S. Army Command and General Staff College or any other government agency.  
(References to this study should include the foregoing statement.)

## ABSTRACT

THE INFLUENCE OF ULTRA INTELLIGENCE UPON GENERAL CLARK AT ANZIO by Major Arthur F. Fournier, USA,

This study addresses the operational use of Ultra intelligence information during the preparation and execution of Operation Shingle or the invasion by Allied forces at Anzio 22 January 1944. At the heart of this discussion is the controversy over whether General Mark Clark received, appreciated, and reacted to Ultra. In addition, the other operational and logistical considerations are examined to fully understand if General Clark was capable of exploiting a window of opportunity or temporary vulnerable German situation after Allied forces were ashore at Anzio.

As background, the study examines briefly the origin of Ultra and how this information was processed as well as disseminated during World War II, in Italy. The Allied military strategy, as it evolved from Prime Minister Churchill and President Roosevelt, is also briefly described to place Anzio in perspective with the upcoming invasion of France (Operation Overlord) and establish the strategic situation that influenced decisionmaking in the Mediterranean theater.

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## CHAPTER 1: INTRODUCTION

One of the most astonishing secrets of World War II was Ultra or highly classified intelligence information derived from intercepting and decoding encrypted German military communications, often to include Hitler's own words or instructions to his subordinate commanders. For nearly thirty years the remarkably well enforced "vow of silence" insured that thousands of analysts, linguists, and Allied intelligence officers as well as the top national leadership of Great Britain and the United States would preserve the knowledge of this secret system. Then, Captain F. W. Winterbotham, a British intelligence officer, revealed the origin, nature, and importance of this sensitive intelligence information in his book, The Ultra Secret.<sup>1</sup> This disclosure unleashed many researchers and writers to examine Ultra during World War II.

Although Winterbotham was certainly uniquely qualified to know the impact of Ultra as he delivered this information to Churchill and executed Churchill's subsequent planning directives, there were many skeptics. Some skeptics asked how much evidence is available to substantiate Winterbotham's story, especially since most of the leaders are dead and documents destroyed.<sup>2</sup> Who, in a position to do something, actually received and reacted to Ultra?<sup>3</sup> How useful was Ultra at the strategic and tactical levels?<sup>4</sup> Some revisionist historians have asked, if Ultra warned the Allies of Hitler's decisions, why did the Allies not win every battle and shorten World War II?<sup>5</sup> And, why did Winterbotham wait until 1974 to reveal the story of this sensitive information? Some of these questions have been addressed in recent

publications. However, there are still portions of World War II that remain vague with respect to Ultra. The reasons for many decisions at critical events of World War II need to be re-examined in light of the tremendous amount of declassified Ultra information that is now available for study. This thesis will address some of the questions posed by skeptics by examining one of the most important battles of World War II.

One of the most critical and controversial events of World War II was the Allied amphibious landing at Anzio on January 22, 1944. This operation has been consistently characterized as achieving complete surprise.<sup>6</sup> Yet, General Mark Clark who was in charge of this operation, has been accused of failing to respond to this surprise by rapidly penetrating the German rear area as well as promptly seizing Rome. On nationwide television, Winterbotham referred to Anzio as the first lost (Allied) opportunity of World War II because General Clark did not take advantage of the enemy situation revealed by Ultra.<sup>7</sup> This was Winterbotham's basis for contending that General Clark did not use Ultra "to the best advantage."<sup>8</sup> He further maintained that if General Clark's forces "had not halted but did what they were suppose to do, it would have knocked the Germans end wise."<sup>9</sup>

General Clark was also interviewed on television concerning these allegations to which he responded by saying that they were "completely false."<sup>10</sup> He later remarked to one writer that "Hell I couldn't wait to get it (Ultra)."<sup>11</sup> But, what Ultra information was Winterbotham referring to and what assurance was there that General Clark actually received it. If General Clark received Ultra reports, who delivered them and did he understand that the reports were Ultra intelligence information as opposed to being information derived from

other sources? Who was right? In hindsight, acknowledging that Ultra was decisive in the Battle of the Atlantic and in operational planning for the Normandy invasion, did General Clark feel obligated to deny Winterbotham's accusations to save face? On the otherhand, was Winterbotham uninformed as to the influence of Ultra at Anzio? These have been unexplained gaps in well written historical accounts of Anzio and yet the answers are crucial to understanding the events accurately as they developed as well as a general officer's integrity and competence.

#### Statement of the Problem

The role of Ultra is important because it provides valuable insight to the circumstances confronted by Allied leaders during World War II. There may also be parallels to the use of similar intelligence during the next war. The significance of Ultra in the Mediterranean theater remains obscure to most United States Army officers. Although some recent publications discuss the role of Ultra in North Africa and Normandy, the Italian campaign is seldom mentioned. More importantly, most Ultra publications fail to place this intelligence information in proper perspective to the decisionmaking process. To understand the many factors, to include Ultra, that influenced operations in Italy, one must understand the strategic and tactical setting. Then, the multitude of planning considerations inherent to this amphibious operation must be examined. Finally, the reasons for subsequent military decisions, once ashore, need to be recognized. Then, the full context of the Winterbotham-Clark controversy during this critical moment of World War II can be more thoroughly understood.

### Statement of Hypothesis

It is hypothesized that Winterbotham was wrong. General Clark received and responded to Ultra prior to and during the Anzio operation. It is also hypothesized that there were crucial planning factors, in addition to Ultra, that influenced General Clark's operational planning. The overriding significance of these crucial factors have led some historians to believe that he did not appreciate Ultra information. But, instead of discounting Ultra, General Clark relied heavily on this source, especially after the Allied forces landed at Anzio. As Ultra portrayed a very threatening German response to the Allied landing, General Clark proceeded cautiously. He did not permit VI Corps to over-extend itself into central Italy; but, instead correctly consolidated, inserted reinforcements, and prepared for a large German counterattack. Notwithstanding, General Clark could have influenced VI Corps into extending the limit of its beachhead perimeter which should have been much further from the shoreline. However, as the dust settled, General Clark's amphibious landing at Anzio survived and eventually succeeded in seizing Rome largely because of the contributions of Ultra.

### Review of Literature

This portion of the thesis will be accomplished in the following threefold manner in appendix A. The assistance of several Ultra-related sources will be discussed in section I to this appendix. The most helpful historical accounts of Anzio that provided a framework for this thesis will be discussed in section II and the actual Ultra messages used for this thesis in section III. The remaining secondary sources

will be listed in the bibliography. In addition, many of the important Ultra-related documents will be mentioned throughout this paper.

#### Methodology

The Statement of Hypothesis will be tested by examining historical evidence, to include the following:

1. Commercially published accounts of the Italian campaign, particularly the Anzio battle;
2. Documents explaining Ultra, especially those discussing the system of dissemination and interpretation of translated intercepts;
3. Interviews performed immediately after World War II with the German generals who opposed General Clark at Anzio;
4. The written version of General Clark's oral history;
5. The memoirs and diaries of important German as well as Allied military leaders that influenced Anzio, to include the diaries of General Lucas, Commander of the amphibious force, and General Kesselring, Commander of the German Southwest Command (southern Italy);
6. The declassified Ultra-related documents released by the National Security Agency to the National Archives;
7. The decyphered and translated Ultra intercept messages covering the period November 1943 to February 1944; and, finally,
8. Interviews and discussions with historians who have studied the Anzio battle or Ultra.

#### Limitations

There are many constraints or limitations that must be acknowledged in this thesis. The following should be considered:

1. General Clark and his staff were not contacted or interviewed for several reasons, not the least of which was the limited amount of time available for travel and money.

2. It is difficult to determine exactly what is being considered in a commander's mind at a given stage of a battle. It is almost attempting to measure the immeasurable. Despite General Clark's remarks in his book, Calculated Risk, and on other occasions, some speculative conclusions are often, at best, still the only conclusions possible. As Ralph Bennett explained in his book, Ultra in the West, no general has left an account of how much he relied on Ultra or when and why he disregarded it.<sup>12</sup>

3. There are still many gaps in our knowledge of Ultra, primarily procedural but also substantive matters. A considerable amount of Ultra material has been destroyed since World War II. Further, there is no way to determine if the British have additional information related to the Italian campaign that remains classified.

4. The actual interpretation of the Ultra intercepts is a problem. Sometimes these messages are in narrative form. Occasionally only one of four paragraphs of a German message was intercepted successfully or given priority for decryption. In addition, some of the messages appear to respond to some type of German formatted report that is answered by line number. There is also difficulty knowing all of the recipients of some intercepted messages.

5. In the historical circles of academia, there are scholars who refuse to acknowledge Ultra in their research and there are some who are influenced by the opposite extreme or profess that Ultra will rewrite all historical accounts of World War II. It is difficult to avoid

being influenced by either group. It is even more difficult evaluating their respective anthologies of operations in the Mediterranean theater.

6. Finally, as Ralph Bennett explained, a commander must take calculated risks and if by choosing the wrong course of action he is criticized, historians must be careful in interpreting the circumstances as existed at the time of the decision.<sup>13</sup> In other words, having the benefit of hindsight about a battle can be dangerous in reconstructing events that influenced key decisions.

#### Acknowledgements

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## CHAPTER 2: BACKGROUND

Intelligence collection alone is often difficult to understand, much less the complex technology, analytical process, and dissemination apparatus that must accompany it. But an examination of Ultra's contributions to Allied operations at Anzio requires an understanding of how Ultra was derived and processed through the intelligence cycle.

What does the term 'Ultra' represent? Ronald Lewin, in his book, Ultra Goes to War, summed it up best as he described Ultra as,

. . . intercepting enemy signals that had been mechanically encyphered, rendering them intelligible, and then distributing their translated texts by secure means to appropriate headquarters.<sup>14</sup>

This is obviously an oversimplification of Ultra; however, it does highlight several important factors. Ultra was dependent upon enemy radio signals, often referred to as Signals Intelligence (SIGINT), or wireless radio communications. However, the most significant factor was the mechanical encypherment of these German signals. Intercepting signals had been achieved by the Allies before the German use of this new encryption device called Enigma. Rendering the German encoded message intelligible though was now a different matter. Once the Allies accomplished this challenge, the 'Ultra' categorization was associated with this information to limit knowledge of this type of intelligence in order to protect the source. This decyphered high level German military communications usually received one of two security classifications - Secret or Most Secret (comparable to the United States Top Secret). Regardless of the

level of security classification, if the information was a decyphered military intercept, the Ultra security restrictions applied.

How was the German encyphering system or Enigma machine used? As Bennett explained, Hitler needed a responsive, reliable, and secure means of orchestrating German units on the battlefield.<sup>15</sup> This was fundamental to the Blitzkrieg concept. This obviously required an extensive radio network. In addition, the Germans recognized the necessity for a special coding system to deny the Allies, if they were listening, an understanding of the radio messages. The Enigma encyphering machine was designed in 1919. It was used by the German navy in 1926 and adopted by the German army in 1929.<sup>16</sup> It also was useful in Hitler's rise to power and it became the solution to his battlefield requirements with a little upgrading.<sup>17</sup> The Enigma machine (figure 1) essentially transformed plain German text into a line of seemingly meaningless gibberish. This gibberish was then transmitted by morse code. The recipient also had an Enigma machine and converted the gibberish into readable German text once more.

In Gordon Welchman's book, Hut Six, this German encryption device is described as revolutionizing battlefield communications.<sup>18</sup> It was common for German regiments, divisions, and corps to have specially equipped radio command and control vehicles, such as General Guderian's in figure 2, that included an Enigma machine.<sup>19</sup> As a result, each German Panzer general had improved command and control, to include more responsive and current enemy situation reports, status reports of subordinate units, and immediate communications with the next higher headquarters without concern for Allied intercept possibilities. Of course, one of the most significant advantages to Hitler was that this system

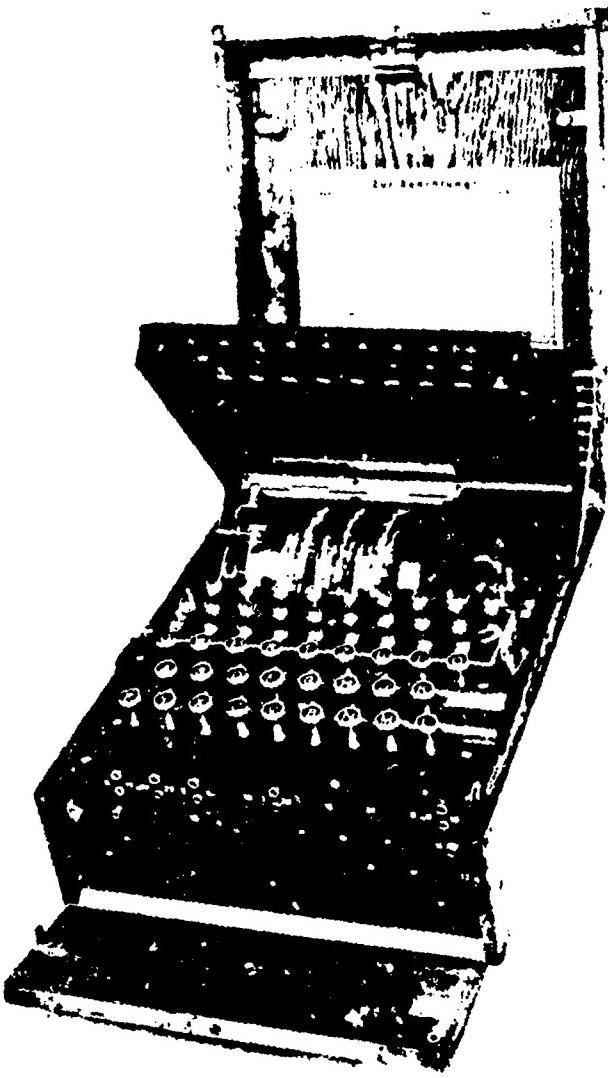


Figure 1

The Enigma machine (left) barely shows the Stecherboard in front but does clearly reveal the typewriter-type keyboard and the complete set of alphabetical letters on the panel above it. The other picture (right) shows the Stecherboard system of plugs and the three rotors that were important in the key setting to decypher messages.



Figure 2

General Guderian's command vehicle in France in June, 1940 typified the command and control vehicles throughout the German units in World War II. His Enigma machine is in the foreground and cipher clerk is reading the message to be transmitted. Note that the Stecherboard is covered as though they knew this picture was being taken and did not want to reveal this modification.

also provided him a direct circuit to any combat unit, down to regimental level, and later in the war, he was criticized by his generals for interfering with tactical operations as well as circumventing his staff and theater commanders to talk directly with a corps commander. This secure communications network did not come cheap. An entire signal battalion was deployed with each Panzer division to support the increased communications equipment.<sup>20</sup> But the important motivation for adopting this system was that the Allies were assessed as not having the capability to intercept or understand Enigma encyphered messages. Even if the Allies obtained an Enigma machine, the Germans felt confident that the Allies would not know the important numerical settings that were placed on the encryption device and would still not be capable of rendering the messages intelligible.<sup>21</sup>

The actual encyphering of a message before transmittal over the radio was somewhat complicated. Generally, the Enigma machine was similar in appearance to a typewriter, except that no text was printed. A three-man team handled the encyphering, normally.<sup>22</sup> One member of the team would manually print a letter. Then, as that letter was pressed on the keyboard of the Enigma machine, a different letter on a separate panel would light up. The second individual would copy this letter down. A third individual would watch both operators to insure that the right letter was pressed and the appropriate letter copied down. Then, this encrypted message was provided to the German radio operator who would send it via morse code. The actual circuitry, operation of rotors, mathematical permutations, etc. within the Enigma machine is discussed by Welchman in Hut Six.<sup>23</sup>

How did the Allies break the Enigma coding system? Actually, the Allies were not the first to accomplish this feat. In the late 1920's and early 1930's, the Polish Secret Service had organized a group of mathematicians to solve the Enigma code.<sup>24</sup> They eventually obtained actual German military Enigma machines and wired six of them together to constitute a "high speed calculating mechanism" which they called the "Bomba."<sup>25</sup> This was the forerunner to the British and American automated decyphering systems in the 1940's, referred to as "bombes." It must be understood that the bombes did not automatically decypher entire messages. These machines reduced the number of variables to a manageable level permitting the mathematicians to solve the encyphered messages. Suffice to say, gratitude and admiration must be given to the Poles, assisted later by the French, for making the critical inroads and successfully breaking Enigma. Of course, as the war turned against the Poles and French, this knowledge was provided to the British who continued to solve the remaining mysteries associated with the German military Enigma machines.<sup>26</sup>

The Germans were constantly adopting new ways to further encypher their messages or complicate potential efforts by the Allies to break their code. This meant refinements to the Enigma machine, such as a Stecherboard or cross-plugging board which frustrated attempts to decypher messages because it produced more permutations of letters. As Welchman explained, this modification magnified the number of variables from millions to over 200 quintillion.<sup>27</sup> There was little wonder why an automated support system was needed by the British. Decyphering was simply beyond the capability of a group of Polish mathematicians and a primitive 'Bomba.' Consequently, new automated solutions were

constantly being researched in Great Britain and the United States. Although some scholars give the impression that there was one bombe used throughout World War II, this was not true. As the German Enigma machine developed into more complexity, different types of equipment were used to decypher these German intercepts. A programme-controlled electronic digital computer was one bombe; but it was only one of the many bombe types.<sup>28</sup>

A discussion of the Enigma machine must emphasize the impregnable nature of this encryption device.<sup>29</sup> That the British found new ways to break the code was attributed to German operator and user errors, not any fallacy of the machine itself.<sup>30</sup> For example, if an analyst could match part of the text with words, phrases, or sentences already known, a big part of the decyphering was accomplished. Some radio operators included in newly encyphered messages, small or large groups of words transmitted in previously encyphered communications. Rommel's Quartermaster at Tripol started all messages to Rommel with the same formal introduction.<sup>31</sup> Once it was decyphered the first time, it contributed to breaking the new encypherment. If a radio operator changed his key settings daily, then the decoding or attempt to break decypher messages started again, but previously decyphered messages provided a base of knowledge and the human element or German use of the Enigma machine was the "Achilles Heel" or inroad to breaking the codes.<sup>32</sup> Sometimes, an encyphered key setting would be repeated and this only facilitated breaking of the Enigma codes though the Germans thought it might prevent mistakes in setting up the Enigma machines on the receiving end.<sup>33</sup> Capturing codebooks, keylists, as well as operator mistakes and, of course, obtaining copies of the Enigma machine

itself all contributed to breaking the code. Welchman expands upon this technical or complex world of traffic analysis to show instances where some messages were very long with special characteristics that identified a unit and thus led to the eventual breaking of the messages.<sup>34</sup>

How was Enigma-derived information processed? There were four basic phases which are similar to the intelligence cycle. The first phase involved the actual collection of these high level morse code communications. This was not a simple task. Peter Calvocoressi explains in his book Top Secret Ultra, that there were many problems experienced with intercepting German communications. The Germans transmitted their messages at volumes or signal strengths which were adequate to reach their own units but not always for Allied intercept stations to hear them farther away. Consequently, an intercept radio operator might hear the first part of a message and then have the signal fade away. In addition, the Germans were masterful at using directional antennas. This was especially problematic in mountainous areas, such as in Italy, where the radio signal was even further channelized which meant that the intercept station had to be practically in direct line with the point of origin and reception to hear the transmission. There was also a problem of sorting out which messages were high level or Enigma-related and which were low or medium level communications. A further explanation of this complication is at appendix D. Suffice to say, not all signals or radio intercepted communications were Enigma-related or Ultra information. It was only the high level German military communications that were targeted by the Ultra intercept stations. One also must remember that Ultra-related signals did not consist of wireless radio

communications coming from a single source or location. There were numerous units using this system as well as other codes.<sup>35</sup>

The second phase involved transmittal of the enciphered message to a processing area. During the initial months of the war, this transmittal was accomplished by motorcycle; however, as the tremendous amount of intercept material increased and the multitude of intercept stations outside Great Britain became necessary, teleprinters were used.<sup>36</sup> It is interesting that German traffic intercepted overseas was sent to the processing area by radio communications after the text had been re-encoded in a British encyphering system. Thus, upon arrival at the processing area, the message would be decyphered first using the British codebooks, then analyzed to decypher the Enigma encryption system, and then examined to determine significance.<sup>37</sup> One can not help but wonder if some messages lost their meaning through all of this but it was certainly unavoidable considering the available communications system and necessity to ensure that the Germans did not know the target of the Allied decyphering effort.

The third phase was the actual processing of the encrypted message. Although the processing area is notably described in nearly all publications of Ultra as being at Bletchley Park, near London, this is not entirely true. The British were quite concerned that a well placed bomb delivered by a German aircraft could destroy Bletchley Park. Therefore, the 'Bombe' machines or sites were scattered throughout the western suburbs of London. The disadvantage was that some important intercepted messages needed to be rushed to Bletchley Park for further analysis or in fact delivery to Churchill. But the time constraint was still

worth the overall assurance that Ultra would survive an inadvertent but well placed German bombing of Bletchley.<sup>38</sup>

Bletchley Park (figure 3) was described by Lewin as an estate with a conspicuous building that appeared as a "solid red-brick bourgeois edifice in a would-be Tudor-Gothic style."<sup>39</sup> Lewin was fairly descriptive but it should also be noted that a honeycomb of huts or wooden structures surrounded this estate mansion and in it were housed the analysts, technicians, linguists, and other workers. Bletchley was therefore compartmentalized. In other words, the workers in one hut or building did not usually know what was going on in a building next door. It should be noted though that the entire installation was situated between the University of Cambridge and University of Oxford which made it convenient to draft mathematicians and other specialized personnel for work in these huts.<sup>40</sup>

The organization of Bletchley Park is still somewhat unclear. As figure 2 indicates, only some of the huts have thus far been identified. Once a bombe performed its "essential ancillary function", the intercepted message was delivered to Hut 6 where mathematicians and other experts would attempt to make the text readable.<sup>41</sup> Then the intercept was delivered to Hut 3 where it was translated into English, analyzed, evaluated, and logged.<sup>42</sup> Winterbotham eventually christened Hut 3 as the "shadow OKW" (Ober Kommando Wehrmacht or German High Command) because it was here that the sensitivity of Hitler's instructions as well as the information being sent to Hitler was collated.<sup>43</sup> There was also a Hut 8 which received naval intercepts, much like Hut 6; and, a Hut 4 which processed naval intercepts, much like Hut 3.<sup>44</sup> Hut 11 does not appear in photographs of Bletchley Park, because it was

# Bletchley Park



RESIDENTIAL PROPERTY OWNED BY THE POST OFFICE AT BLETCHLEY PARK, BUCKINGHAMSHIRE

To the thousands who worked on ULTRA, Bletchley Park was simply BP. Now it is used by the Post Office as a training centre although no mention is made of its former history in the brochure (above) given out to students today. Alastair Denniston remained in charge until June 1940 when his poor health dictated that a successor be appointed (Edward, later Sir Edward, Travis). The renowned American cryptologist William Friedman, who was the key man on the team which cracked the Japanese Purple Code, wrote to Denniston's daughter: 'Your father was a great man in whose debt all English-speaking people will remain for a very long time, if not forever. That so few should know exactly what he did . . . is the sad part.'

Figure 3



Figure 4

located elsewhere and was responsible for the various bombe sites outside Bletchley.<sup>45</sup> There were other huts identified in the photograph in figure 4, to include an Army hut, an Air Force hut, Hut F, and Hut G. However, there is little if anything available to discuss the function of these sections. One hut that was not identified was Hut ISK where intercepts that raised special problems were received and whose function was therefore somewhat similar to Hut 6.<sup>46</sup> Although this thesis is concerned only with military intercepts, there were also diplomatic as well as other government and service German enciphered coding systems that were probably the focus of attention at Bletchley. As this type information becomes available through the British Public Records Office, perhaps the entire organizational structure of Bletchley Park as it existed during World War II will someday be known.

The fourth phase was the dissemination of Ultra information. Of course Winterbotham delivered Ultra messages to Prime Minister Winston Churchill. Churchill, in asking for this information, would say - "Where are my eggs?"<sup>47</sup> He hardly ever referred to the term 'Ultra.' He also referred to the people at Bletchley Park as ". . . the geese who laid the golden eggs and never cackled."<sup>48</sup> The analysts in Hut 3 decided where and how rapidly to send Ultra information.<sup>49</sup> Then it was transmitted (See Appendix G for examples) through the Special Liaison Unit (SLU) system established by Winterbotham.<sup>50</sup> Lewin described a typical SLU, such as the one located at General Bernard L. Montgomery's Eighth Army headquarters in North Africa, as consisting of a "hand-picked officer" accompanied by a small section of cipher sergeants and signal support personnel.<sup>51</sup> Winterbotham was faced with the next requirement to establish specific rules to secure Ultra. Striking a

balance between operational use of Ultra and protecting the source was not an easy task. He finally arrived at the following security restrictions or procedures:

1. The number of people authorized to see Ultra was strictly controlled and permitted only with Winterbotham's permission;
2. The SLU was responsible for personally delivering the Ultra message to the commander or an authorized member of his staff;
3. All Ultra messages were to remain under the physical control of the SLU and destroyed after being read and understood;
4. Ultra messages were transmitted over the special short-wave radio communications net between SLU's and transmittal over any other means was not authorized;
5. Actions executed by a commander on the basis of Ultra information was to be by way of an operations order, command, or instruction which in no way referred to Ultra or could lead the enemy to believe that his signals were being intercepted;
6. No recipient of Ultra could place himself in a position where he might be captured; and,
7. All recipients of Ultra had to be briefed or indoctrinated as to the sensitivity of Ultra and the security restrictions that applied.<sup>52</sup>

Churchill allowed only a few individuals initially to receive Ultra information. But in 1942, the number of individuals requiring some knowledge of Ultra grew. In August 1942, General Dwight D. Eisenhower and his staff established the headquarters of the Allied forces for North Africa in London. They became the first American military leaders to be briefed on Ultra.<sup>53</sup> Actually General Eisenhower and

his chief of staff, Major General Walter Bedell Smith, had already been told of Ultra by Churchill.<sup>54</sup> But the other members of the staff had not learned of this sensitive sources of information. General Mark Clark, General Eisenhower's deputy, was one of these individuals. It was at this moment that Winterbotham formed a very disturbing view of General Clark. General Clark did not seem to be interested in Ultra.<sup>55</sup> More importantly, he expressed disbelief when Winterbotham explained some examples of what Ultra could do.<sup>56</sup> To a large extent, as British scholars writing about Anzio recall Winterbotham's discouraging attempts to brief General Clark on Ultra, the portrayal of Clark as being unappreciative of this source of information at Anzio is understandable.<sup>57</sup> But individuals change their perceptions as tactical conditions or circumstances change and this appears to characterize General Clark. A description of the SLU that supported General Clark is at Appendix F.

General Clark was not the only general officer to frown initially at Ultra. General Montgomery also did not like Ultra, initially. His dislike was not so much Ultra itself as the fact that Churchill received it first. General Montgomery even attempted to change the procedure so that he received it first and Churchill later on, but Churchill said no! But Ultra contributed significantly to General Montgomery's operations in North Africa and, in fact, was responsible for General Montgomery preparing for General Rommel's final "onslaught" on 31 August 1942. Therefore, General Montgomery eventually learned to appreciate Ultra though he never liked the dissemination system that allowed Churchill to know so much of his situation.<sup>58</sup>

There were problems experienced by the Allies during the war that the best intelligence could not solve. As Lewin explained, "Cryptanalysts alone cannot stop ten panzer divisions."<sup>59</sup> He added that some scholars have suggested that there be another principle of war taught in all staff colleges which specified that 'one must be more powerful.' The lesson of the Battle of France for Ultra was that friendly forces must be adequate to do something when Ultra information answered the crucial or essential questions about the enemy. As Lewin noted,

It was also terrifyingly evident, as it would be in Greece and Crete a year later, that even the best of secret intelligence diminishes in value if the enemy is overwhelmingly superior.<sup>60</sup>

The circumstances at Anzio would again be analogous to Lewin's description of Greece and Crete, and perhaps even more complicated than not having adequate forces available.

A significant problem that was experienced by operational commands involved Winterbotham's rule number five. In other words, to use Ultra derived information, another source often had to be found. The classic example was the German transports departing across the Mediterranean to refuel Rommel's armored units.<sup>61</sup> As Ultra intercepts verified the locations and routes as well as the final destinations of these ships, another source had to be devised to protect Ultra. Therefore, an Allied reconnaissance aircraft would suddenly appear over the ship to permit Allied submarines an opportunity to sink it and leave the ship's crew with the impression that they had been discovered by an aircraft not an intercepted radio message.<sup>62</sup> The problem was often

finding the other source and the time required to permit collection by that source plausible. There were even times when the weather was bad and a reconnaissance aircraft was out of the question. In such cases, three submarines might have to be sent out with a seemingly innocent patrolling mission but in reality one of them deliberately sent to the location of a German ship identified by Ultra as crossing the Mediterranean at a certain time. As Dr. Deutsch has mentioned, it must have seemed purely accidental to the submarine commander who had the good fortune of sinking the transport.<sup>63</sup> However, the cost to this operation was the dispatch of two other submarines on a "wild goose chase."

One other problem that deserves special consideration before any discussion of the Italian campaign is the deliberate use of German wireless radio silence. Although to those who have studied Ultra, the Ardennes offensive in December 1944 is considered to be the classic case of Ultra not collecting German intercepts because landline telephone systems were used, there were other less publicized cases as General Clark would discover.<sup>64</sup>

Finally, one must recognize a few key characteristics of Ultra information. It was consistently reliable; however, an individual such as General Rommel would often change his operations plan at the last moment before an attack making Ultra derived information appear unreliable.<sup>65</sup> Nevertheless, there is no evidence of the Germans attempting to deceive the Allies by planting erroneous or deceptive information through the Enigma encoding system. Reliance in the 1980's on similar signals intelligence could be disastrous; nevertheless, during World War II Ultra had to receive an A-1 rating. Notwithstanding this accuracy, a lesson that Allied intelligence officers as well as commanders would

have to learn was that Ultra should not be relied on as the only source of information.<sup>66</sup> It needed to be integrated into the intelligence picture portrayed by collecting low level signals, prisoner of war reports, aerial reconnaissance, as well as other sources.

The contributions of the 849th Signal Intelligence Service were very important at Anzio as its intercept sites collected low and medium level German military communications. There has been some speculation that this American unit was also responsible for collecting high level military communications or Ultra intercepts in Italy.<sup>67</sup> In any event, General Clark appreciated their services sufficiently to take two Sigint collection detachments with him during the Anzio amphibious landing. An examination of the 849th SIS organization and capabilities is in appendix E. In addition, copies of letters of appreciation from General Clark and others to the 849th SIS for their important support are also included as enclosures to appendix E. These letters hardly portrayed the character of a man that was unappreciative of Sigint. Their participation in the amphibious landing at Anzio was unprecedented in military operations. The 849th did not arrive in Sicily until several weeks after the Allies secured the island.<sup>68</sup> Although security reasons or the vulnerability of the Sigint detachments were offered as the justification for their late arrival, this rationale is questionable. If General Clark had been in charge, perhaps the 849th SIS would have participated more directly in support of the Allied military operations at Sicily.<sup>69</sup>

### CHAPTER 3: SETTING FOR ANZIO

A general understanding of Allied and German strategy, the tactical situation, and important leaders in 1943 is necessary to appreciate the circumstances leading to Operation Single or the Anzio operation. At the outset of 1943, the national interests of the United States hinged on the survival of Great Britain. Therefore, fighting Germany first and then Japan was the basic strategic aim.<sup>70</sup> How, when, and where to fight Nazi Germany was a debatable topic between Prime Minister Churchill and President Roosevelt. The divergence of views was actually more sharply debated between the British military leadership and the United States Joint Chiefs of Staff.<sup>71</sup> This is important to understand because certain historians have questioned whether General Mark Clark as well as General Eisenhower and other American military leaders really had their heart in attacking up the Italian peninsula. Therefore, to understand the political and military influences that originated Operation Shingle, Allied military strategy should first be examined.

#### Allied Strategy

Great Britain and the United States agreed that the key to defeating Nazi Germany was placing the main effort in a cross-Channel invasion of France. This operation or undertaking was referred to as Overlord. The United States was motivated to undertake Overlord because of three factors: resources were being strained by requirements in the Pacific; there was a necessity for a plan that would concentrate limited

resources; and, it was essential that Nazi Germany be defeated as early as possible so that efforts could be redirected toward the defeat of Japan. Therefore, the United States wanted to attack across the Channel in the Spring 1943.<sup>72</sup>

Great Britain, on the other hand, disagreed with the timing of American military strategy. The British felt that a cross Channel attack in the Spring 1943 would be impractical and too reckless. Therefore, Prime Minister Churchill advocated that the Allies should attack in the Mediterranean first.<sup>73</sup>

Prime Minister Churchill's reasons for opening a second front or shifting offensive operations to the Mediterranean area has been the focus of many historical discussions. Suffice to say that some historians are convinced that Churchill had geographical ambitions in the Balkans while others contend that he foresaw Stalin's Soviet Red Army spreading their influence toward Eastern Europe and hoped to stop it.<sup>74</sup> There may also have been the influence of Dunkirk haunting Churchill. Further, the British Army did not have a high reputation for winning many battles, much less for attacking an entrenched Nazi German force along the coastline of the Channel, which they would have to do if they had succumbed to the American Joint Chiefs of Staff proposal to attack in the Spring 1943.<sup>75</sup> Regardless of the rationale, Churchill opted for an invasion of North Africa which would mean opening a second front or Mediterranean Theater of Operations.

Initiating military operations in the Mediterranean was not endorsed by the United States for several months. The United States Joint Chiefs of Staff contended that the Mediterranean Theater was inconsequential and it would only divert men and resources from Operation

Overlord.<sup>76</sup> But the British did not reject the concept of Operation Overlord. This cross-Channel offensive simply had to be timed properly and they did not believe that it made any military sense to attack a German Army that was prepared for such an Allied attack.<sup>77</sup> Finally, President Roosevelt overruled the Joint Chiefs of Staff by committing the United States Army to support British operations in North Africa.<sup>78</sup> The reasons for that decision are not very clear; however, Churchill and Roosevelt's desire to keep the Alliance strong regardless of strategic differences may have motivated President Roosevelt to submit to Mr. Churchill's plan or determination to invade North Africa.

The meetings between American and British military leaders in Casablanca during January 1943 were not particularly encouraging to the American Joint Chiefs of Staff either. The British arrived well prepared for this conference and the American military leaders were much less well organized.<sup>79</sup> Basically the British objective was to persuade the Americans that Sicily should be attacked next, once North Africa was free of German soldiers. Again, the American military leadership did not concur and pushed for an attack across the Channel. However, the British arguments were too strong. One member of the American military delegation commented:

In matters touching the European Theater, the British had a 100 per cent airtight, hermetically sealed monopoly on intelligence about the enemy . . . . They were the sole and unquestioned authority, first, because we had no military intelligence on the Continent worthy of<sup>80</sup> the name and, second, because the British had an excellent one, too.

Of course, Ultra was the excellent source of intelligence referred to by this American delegate. He added that the British concealed a lot of intelligence and only revealed what was absolutely necessary to support

their strategic arguments.<sup>81</sup> In addition, Mr. Churchill was very impressive as he advocated the concept of striking "into the underbelly of the Axis."<sup>82</sup> Knocking Italy out of the war had tremendous advantages, to include denying twenty-nine Italian divisions in the Balkans and five in France to the German war effort. The outcome of the Casablanca Conference was the endorsement by President Roosevelt to attack Sicily after North African operations concluded. Again, the American Joint Chiefs of Staff were overruled.<sup>83</sup>

The Trident Conference in Washington during May 1943 finalized plans to attack Sicily but did not resolve subsequent military strategy.<sup>84</sup> Essentially, the Allies agreed that the military goal was to eliminate Italy from the war. However, it was difficult to assess the German and Italian reaction to an invasion of Sicily. General Dwight D. Eisenhower, Commander, Allied Forces in the Mediterranean, believed that an attack into southern Italy might be necessary. General George C. Marshall, though, was more cautious. He was very concerned about further stretching limited Allied resources away from Operation Overlord. In fact, General Marshall attempted to use this conference to obtain British agreement that Operation Overlord be scheduled for Spring 1944. General Marshall was not successful because the British maintained that there was a scarcity of landing craft and this important logistical issue needed to be resolved first. Meanwhile, Mr. Churchill tactfully and successfully returned everyone's attention to the opportunities available in the Mediterranean. He stressed that an attack into southern Italy should be planned as a follow-on mission. It would continue the momentum, tie-down German troops and possibly even divert some from the Channel coast, as well as permit the Allies to secure airfields

for bombing southern Germany. The outcome of the conference, aside from finalizing military operations to invade Sicily, was to postpone subsequent military plans until Sicily was won.<sup>85</sup>

On 10 July 1943, the Allies successfully invaded Sicily (figure 3-1). Of course Ultra had a very significant impact upon Allied military operations in North Africa; however, its value was not completely appreciated until the Sicilian invasion, code named Operation Husky. Whether the reliability of Ultra in North Africa was undermined by the unpredictable nature of General Erwin Rommel who often changed his operational plans at the last moment before an attack or Ultra perhaps was not received consistently in sufficient time to permit useful exploitation of this sensitive source is unclear. In any event, Ultra became more useful and decisive in planning Operation Husky.<sup>86</sup>

Strategic deception was crucial to Operation Husky. Considerable effort was directed toward convincing the German High Command that the Allies intended to land in Sardinia or Greece. Ultra proved exceptionally useful in validating the success of these deceptive efforts.<sup>87</sup> Ultra revealed, for example, the movement of the 1st Parzer Division from France to Greece as well as the movement of other units from Russia to Greece. In addition, German troops were moved to Sardinia and over 100 aircraft were shifted from Sicily to Greece and Sardinia.<sup>88</sup>

Military historians have not recognized the important role Ultra played in Operation Husky because Ultra was only recently declassified. Unfortunately, they have referred to the invasion of Sicily as an unexpectedly easy Allied attack.<sup>89</sup> This interpretation is faulty. The Allies knew exactly where to attack in Sicily and the disposition of



Figure 3-1

German forces. This information was provided by Ultra after General Field Marshal Albert Kesselring sent an update to the German High Command explaining the disposition of all German forces in Sicily. General Eisenhower thereby discovered that he was opposed by the German 15th Panzer Division, the Herman Goring Panzer Division, and some Italian troops who lacked transportation and were poorly equipped.<sup>90</sup>

The Allied invasion of Sicily proceeded extremely well; however, the limitations of Ultra became apparent also. Lewin clearly portrays one example of Ultra's limitations during the Sicilian invasion.

Yet the Americans' North African Theater of Operations Intelligence Summaries had nothing to say about the Herman Goring and the 15th Panzer Divisions. General [James] Gavin, who was later to win great distinction in command of the 82nd Airborne Division at Arnhem, dropped on the 10th (July) with his 505 Parachute Regimental Combat Team to cover the landward approaches to the harbor of Gela - soon to become an important point of entry. But he knew nothing about the Herman Goring Division though its armor was lurking within striking distance: Patton's staff had strict instructions not to inform Gavin's <sup>91</sup> command because of the likelihood of their being captured.

These were the rules associated with Ultra. This sensitive source was so important that Churchill did not want to risk disclosing knowledge of it to those in actual contact with the enemy or likely to be captured, even if it might prevent them from being captured. As it turned out, Gavin's force survived, though he still believes that his airborne forces could have at least been outfitted with more antitank weaponry even if he was unauthorized to receive Ultra information.<sup>92</sup>

General Sir Harold R. L. G. Alexander, Commander, 16th Army Group, commented after the Sicilian operation that Ultra brought an "entirely new dimension into the conduct of warfare."<sup>93</sup> General Eisenhower similarly expressed fond admiration for this source of information which also provided him the best source of information of the

whereabouts of his own units.<sup>94</sup> Ultra had been so successful that General Eisenhower was even aware of General Kesselring's intent to withdraw across the Straits of Messina.<sup>95</sup>

This poses the interesting question as to why General Eisenhower did not cut off this German withdrawal or escape to the Italian mainland? There seems to be no easy answer, only speculative possibilities. For example, General George Patton's Seventh Corps had been making a fast end-run to Palermo with the full knowledge that nothing was in front of him. But, the German withdrawal was evidently a very rapid and organized effort because even General Patton could not interdict them (figure 3-2). Still, one wonders why Allied air could not have interdicted that sensitive geographical chokepoint that extends from Sicily to the Italian mainland. There may have been some concern for the safety of Ultra as a source; that is to say that perhaps no other source of information could have logically explained the timing of the German withdrawal to permit a targetted air interdiction of the Straits of Messina. In similar instances, the Allies chose to do nothing in North Africa rather than risk German knowledge or deductions that their high level Sigint communications were being decyphered. This could have been another one of those frustrating limitations. Nevertheless, it did not alter the outcome of Operation Husky in the sense that Ultra began to achieve respect in the eyes of Allied military leaders.

The third important Allied conference occurred in Quebec in August 1943. The top British and American leadership met to discuss military strategy once more. General Marshall continued to press for a target date for Operation Overlord while British General Sir Alan Brooke pushed for American agreement to invade the Italian mainland. The full

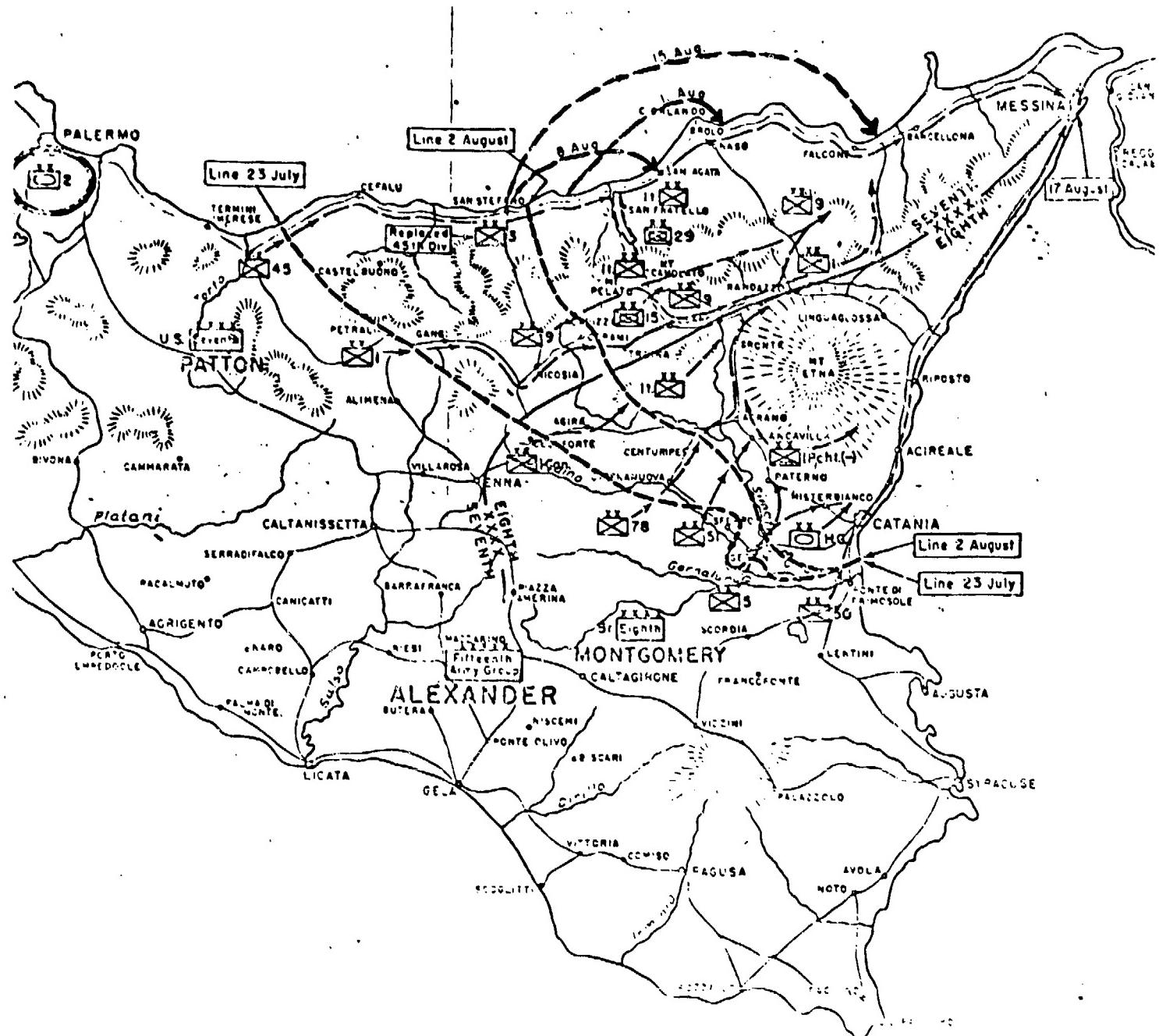


Figure 3-2

The Allies attempted to cut off the retreating German forces on the 8, 11, and 15th of August by conducting amphibious landings along the north coast of Sicily where a major road leading to Messina was located. However, these landings were actually slower than the rapidly advancing Allied land forces.

impact that Ultra had on this conference is still difficult to assess. However, it certainly had some degree of influence. For example, Ultra revealed in August that Hitler had decided to pull out all German forces from southern and central Italy.<sup>96</sup> Furthermore, Ultra disclosed that large numbers of German army and air forces were preparing to occupy the northern tier of Italy.<sup>97</sup> This Ultra information indicated that Hitler had lost faith in the Italian government and perhaps expected them to eventually capitulate. The news that the Italians were secretly negotiating with General Eisenhower to abandon their alliance with Germany was no doubt welcomed during the conference and fostered attempts to derive an agreed upon strategy. General Brooke exploited the news by stressing that the Allies now had an opportunity to ". . . suck not only divisions but whole German armies" into southern Italy, thereby diverting these units from potential employment across the Channel.<sup>98</sup> Maybe it was this opportunity that finally elicited General Marshall's agreement to invade the Italian mainland. More likely, it was the British concession to set 1 May 1944 as the scheduled date for Operation Overlord that prompted General Marshall to be more conciliatory.

One still must ask the question: did it now appear to General Marshall and General Eisenhower that extensive resources might not be required for an invasion of the Italian mainland if Ultra could continue to provide the same high quality intelligence as during the Sicilian operation? In other words, was Ultra too successful? These are unfortunately not questions easily answered. General Marshall was aware of Ultra.<sup>99</sup> He was also very surprised that there were very few losses in shipping and landing craft during the Sicilian operation.<sup>100</sup> But, unfortunately there are no written diaries or records to indicate that

General Marshall decided to go ahead with British desires to invade the Italian mainland because of the significant advantage derived from Ultra. Nevertheless, there definitely was one important influence upon General Marshall and that was the opinion of Major General George V. Strong, the United States Army G-2, who recommended that an invasion of the Italian mainland be executed, especially in view of the overwhelming success in Sicily.<sup>101</sup>

In sum, the British and American leadership had finally arrived at an agreed upon military strategy. However, the seeds of distrust would remain for a while longer. It would still seem to General Marshall and others that Mr. Churchill was dragging his feet on Operation Overlord. There would be arguments over the number of troops planned for the operation, the availability of sufficient landing craft, and other issues. However, General Marshall remained confident that he had a date fixed for Overlord and it would be difficult for the British to back away from it.

#### German Strategy

A brief examination of German strategy is also important to understand the Allied situation that developed Operation Shingle. Hitler's strategy was in a muddled state in 1943. There was but one certainty. He would never consider withdrawal from the Eastern Front because it would mean abandoning his "historic mission" which was to overthrow Bolshevism, and, by blowing up the Kremlin, Hitler believed that it would symbolize the defeat and overthrow of his potential enemy threat on Germany's eastern border.<sup>102</sup> But Hitler had alternatives in Italy. He suspected that the Italian government, whether headed by

Benito Mussolini or newly appointed head of the government, Pietro Badoglio, would eventually capitulate to the Allies.<sup>103</sup> But his real concern was an invasion of Greece or the Balkans.<sup>104</sup> It was here that Germany controlled territory rich in oil and strategic minerals and important to the war effort. Of course, the Allies recognized that vital German interest and it made the credibility of their deception efforts that much more acceptable in the German High Command. Hitler's options were to defend all of the Italian mainland, surrender all of Italy, or attempt to retain only the northern portion. In deciding to pursue the last course of action, he instructed Field Marshall Rommel to organize a "skeleton army group headquarters disguised as a rehabilitation center" in Munich.<sup>105</sup> Rommel was to be prepared to accept up to six infantry division, move into northern Italy, and defend the northern Appennine Mountains.<sup>106</sup>

Field Marshal Kesselring, Commander in Chief, South, had been in charge of Axis operations in Italy since 1941. He was convinced that Italy would continue the war, even if Mussolini were overthrown.<sup>107</sup> He was also certain that a defense of Italy was feasible. Nevertheless, when he discovered Hitler's intentions to relinquish southern Italy contingent upon an Italian surrender and give Rommel command of the remaining northern tier, Kesselring submitted his resignation - only to have Hitler refuse it.<sup>108</sup> Thwarted, Kesselring had no choice but to start German plans for evacuating southern Italy. But for some reason, Hitler was reluctant to give the execute order to the evacuation plan. Perhaps there was still an element of uncertainty as to whether Kesselring was right in feeling that the Italians would not surrender. On the other hand, Hitler may have wanted to keep the Allies off balance as to his

real intentions and therefore planned to withdraw only when it became apparent that the Allies would definitely attack the Italian mainland. Of course, this begs the question: how much did Hitler know about the divergent views expressed by General Brooke and General Marshall as to the course of Allied military strategy, i.e. attack across the Strait of Messina vs. the cross-Channel attack? It is an unanswered question in historical accounts of World War II; however, David Kahn explained in his book, Hitler's Spies, that Hitler was puzzled over Allied military strategy.<sup>109</sup> Hitler was convinced that the Allies would attack across the Channel in 1943 and yet he also speculated that the Allies probably would attack Italy or the Balkans. Uncertainty over Allied military strategy therefore left Hitler in a quandry over his own military strategy.

#### Tactical Situation

The invasion of southern Italy was planned as one of several contingencies by General Eisenhower's staff at least a month before the Germans evacuated Sicily (See Appendix B, Chronology).<sup>110</sup> As soon as the outcome of the Quebec Conference was transmitted to General Eisenhower indicating Allied agreement that an attack upon southern Italy should follow the seizure of Sicily, General Eisenhower's staff finalized operational planning.

The general Allied plan to invade Italy was a three-pronged attack (figure 3-3). First, the Eighth Army moved across the Strait of Messina into Calabria on 3 September. This was referred to as Operation Baytown. On the same day, General Clark's Fifth Army sailed for Salerno. Then, on 9 September as General Clark's forces conducted the

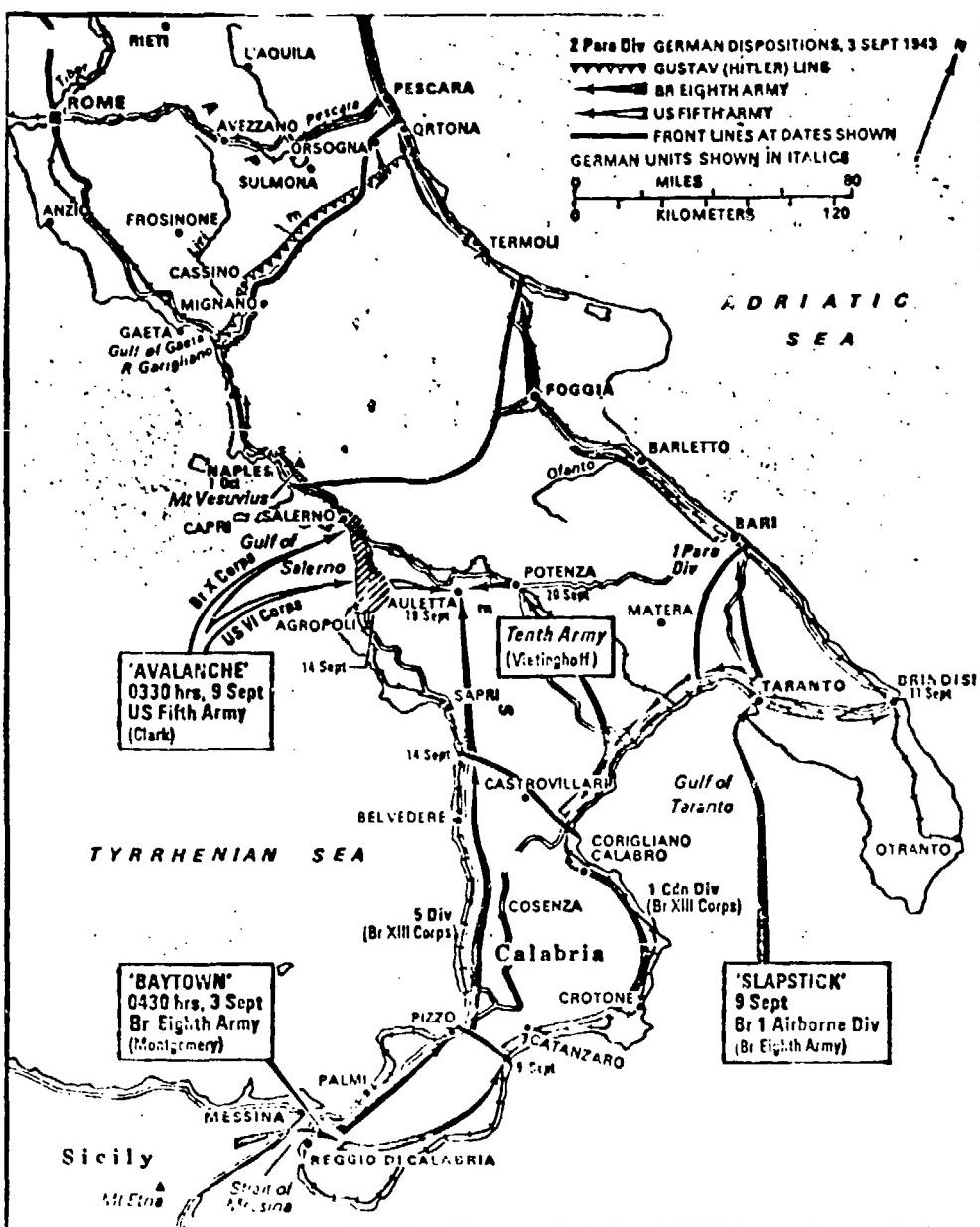


Figure 3-3

amphibious landings at Salerno, otherwise referred to as Operation Avalanche, the British 1st Airborne Division was inserted into Taranto. The Eighth Army and 1st Airborne Division operations were intended to be supporting attacks as General Clark's amphibious landing at Salerno was the main effort.<sup>111</sup>

The overall execution of these three operations was the responsibility of General Alexander, Commander, 15th Army Group. This was the normal command set-up as General Alexander was in charge of all land forces subordinated to General Eisenhower's Allied Forces, Mediterranean.<sup>112</sup> General Alexander's specified objective was Naples.<sup>113</sup> Naples was selected because it was one of the two major railway centers in southern Italy, possessed a good airfield, and had an excellent deep water port. In achieving this objective, two good beachheads were examined, Salerno and the Gulf of Gaeta. Salerno was finally selected because it was only 25 miles south of Naples (the Gulf of Gaeta was 40 miles north of Naples), within range of fighter support from Sicily (the Gulf of Gaeta was beyond the range of air support), and a linkup with the Eighth Army could be facilitated south of Naples whereas a landing at the Gulf of Gaeta would be much farther away and no doubt be more vulnerable to German counterattacks from the north before the Eighth Army ever arrived.<sup>114</sup>

What was the enemy situation around Salerno? Lewin explained that Ultra reported the 16th Panzer was the only German division near Salerno, but there were two other divisions not far to the north of Rome as well as the Herman Göring and 15th Paratroop Grenadier divisions a little over 100 miles away.<sup>115</sup> Interestingly, General Clark describes this same enemy situation in his book, Calculated Risk; however, he

does not credit Ultra as the source of this information.<sup>116</sup> In any event, it was a formidable German force that the Fifth Army would confront.

There has been much speculation concerning General Clark's decision to not plan a preparatory fire or naval bombardment before Allied soldiers waded ashore at Salerno. Some historians contend that General Clark had fooled himself into believing that surprise could be achieved while others have suggested that Italy had just surrendered and General Clark wanted to avoid bombing Italian villages and towns at a time when their attitude and support for the Allies was important.<sup>117</sup> However, the real reason for General Clark withholding a pre-invasion bombardment is probably as he described the situation in his memoirs. He stated,

As the men clambered into landing craft and the small boats maneuvered noisily into position all around us, I could see flashes of gunfire on the north sector of the assault zone where British warships were laying down a barrage in front of the British X Corps' first wave. On the south sector the American VI Corps was attempting to land quietly without previous bombardment, but there were ominous hints that the enemy was alerted.<sup>118</sup>

In other words, General Clark had made an attempt to deceive German forces by portraying the British X Corps as the invading force while he hoped to surreptitiously insert the VI Corps to the south (figure 3-4). A naval bombardment had traditionally tipped the enemy as to an anticipated attack or, in this case, amphibious landing; therefore, it was not an oversight or gross case of incompetence to withhold a pre-landing naval bombardment in the southern sector. It was a calculated risk that simply did not work. As Colonel John D. Forsythe, Commander of the 142nd Regimental Combat Team, and Colonel Richard J. Werner, Commander of the 141st Regimental Combat Team, led their soldiers ashore as the

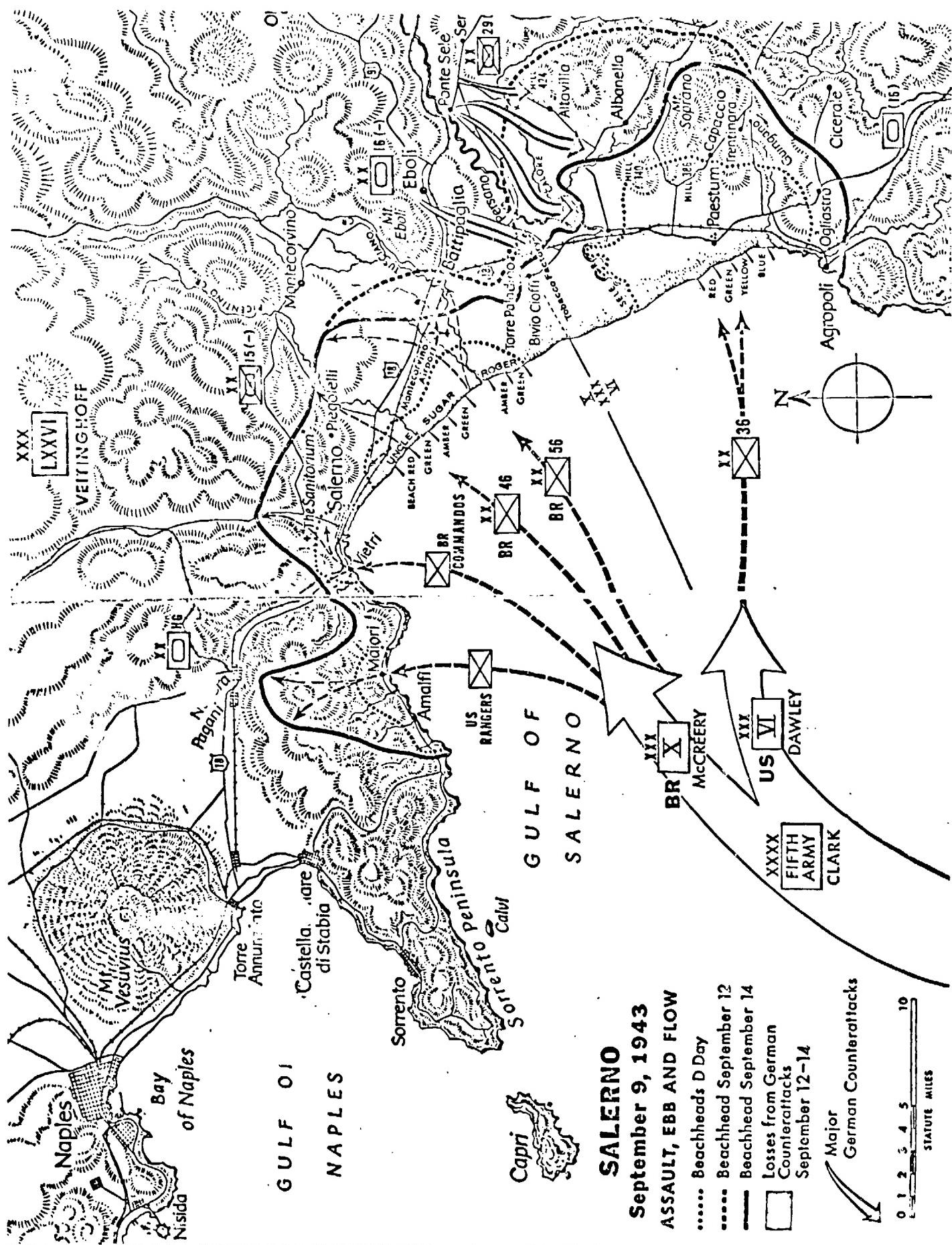


Figure 3-4

initial elements of the 36th Division, flares illuminated the beaches and German guns zeroed in on the landing force.<sup>119</sup>

Did Ultra fail to warn General Clark that the Germans were preparing for the Allied landing at Salerno? Aside from the dispositions of German divisions, Ultra did not have much information to provide General Clark. There is some evidence to suggest that Ultra intercepted the transmission of the word "Achse" which was the German codeword for an imminent landing and order to adopt a high state of alert.<sup>120</sup> This codeword was transmitted approximately 24 hours prior to the landings. However, it was not enough to indicate that the German forces were expecting a landing at Salerno as opposed to the Gulf of Gaeta. The meaning was not of this codeword was open to considerable speculation and certainly not enough to cancel Operation Avalanche. But the problem for Ultra was that German military leaders were not using high level wireless radio communications as often as they did in Sicily.<sup>121</sup> The use of landline radio or the type of communications normally associated with a contemporary telephone system seemed to be employed. Of course, there was no way to intercept wired communications, albeit having a telephone device in hand and connected to the wired communications line that stretched along the coast from a division headquarters, for example, to General Kesselring's headquarters. But this still does not explain why General Clark or General Alexander did not employ other intelligence collection assets, such as aerial reconnaissance, to determine General Kesselring's last minute dispositions. Although speculative, a possible explanation for the Allied lack of initiative was that the Allied military leaders were impressed with Ultra before and during operations in

Sicily to the extent that there was a tendency to rely on it as a source of warning for Operation Avalanche.

Aside from the lack of Ultra, there were some other very basic problems or errors associated with planning Operation Avalanche. For example, one of the basic tenets in planning any military operation is to have an appreciation for the terrain. There seemed to be little if any appreciation for how vulnerable troops would appear on the beach as they departed the landing craft. General Clark commented,

. . . we did not fully realize how great was the advantage of the Germans in holding all the high hills surrounding our beachhead, from which they continually were looking down our throats. Not until months later, when I had occasion to fly low over the German positions at Salerno, did I wholly realize how well the enemy had been able to observe our movements<sup>122</sup> and thus shift his strength and artillery to oppose our thrusts.

General Clark's remarks add to the mystery or unanswered question as to why there was no aerial reconnaissance or other attempts to acquire information related to the landing area. However, General Clark did not demonstrate that he had learned a lesson because there was a similar situation experience at Anzio. Although the Anzio terrain would not be an exact replica of the Salerno topography, geographic conditions would be somewhat similar as German forces would again occupy key high ground and direct artillery down upon amphibious Allied forces.

The command setup at Salerno also bothered General Clark. He believed that there should have been one commander in charge of air, naval, and land forces at Salerno.<sup>123</sup> He stated that General Alexander's headquarters was in Sicily and that was too far away to influence immediate problems at Salerno.<sup>124</sup> Furthermore, General Alexander had no control over naval and air forces. They were answerable only to General Eisenhower, the Supreme Commander, and his

headquarters was in North Africa. The three commanders at Salerno were, in fact, in violation of the principle of war - unity of command - at least at the operational area. This led to problems.

In the planning for Operation Avalanche, there was no provision for a time that the Navy would hand off command of the military situation to General Clark. General Clark remarked that in the case of Salerno it was not a major problem because he happened to be available when the Navy commander, Vice Admiral Henry Kent Hewitt, proposed that General Clark take over. But, if General Clark had not been available for consultation, it could have been a difficult transfer. As it turned out, General Clark happened to be ashore obtaining an estimate of the situation when Vice Admiral Hewitt received orders from his navy superiors to land the reserve immediately to make additional landing craft available. The result was that the Fifth Army reserve was inserted ashore in the wrong place.<sup>125</sup>

There were other problems related to the command structure. One example cited by General Clark was with regard to planning for an air cover to protect the convoy enroute to Salerno. General Clark asked Major General Edwin J. House, the Air Liaison Officer, what provision had been made for an air cover to protect the invasion force. Major General House responded that he did not know because that was a matter for the Coastal Air Command.<sup>126</sup> Confidence in the coordinated planning for Operation Avalanche was further undermined when General Clark discovered that they Navy had loaded VI Corps without any concern for command and control. For example, the VI Corps staff and commanders were not together on one ship, nor had they any appreciation about developments as they arrived and landed.<sup>127</sup> The basic problem as General

Clark surmised, was that there was no responsibility for the overall operation firmly designated at Salerno. Consequently, the Navy and Air Force were simply not tied into the land operation. A few other examples of the confusion that developed involved the VI Corps Commander, General Lucas, who decided to go ashore after the first wave landed to obtain an estimate of the situation. There was good reason for this decision because no one knew where to send spot reports from the beachhead.<sup>128</sup> The actual location of the corps staff was unknown and there was a real question of whether situation reports should therefore be sent anywhere. Therefore, there was little reason to wonder why the VI Corps Commander and General Clark decided to obtain their own estimate of developments ashore. Further, it is not surprising that when General Clark did assume responsibility for the military situation at Salerno from Vice Admiral Hewitt that the VI Corps Commander could not be located.<sup>129</sup> The influence that his command and control problem would have on General Clark at Anzio cannot be measured; however, one might expect it to undermine his confidence somewhat.

The rapid mobility of the German Army became another significant factor at Salerno that General Clark no doubt remembered at Anzio. The Allied air forces had three tasks: (1) protect the convoy as it arrived at the landing site; (2) destroy German communications sites, airfields, railway centers, bridges, and create roadblocks to delay movement toward the beachhead; and, (3) destroy German military installations.<sup>130</sup> But, as General Clark remarked, though the Brenner Pass as well as other targets, i.e. tunnels, bridges, communications lines were "battered steadily," it seemed to have little affect because the Germans quickly continued to increase quickly their strength.<sup>131</sup> General Clark,

however, left Salerno with little confidence in the efficiency of air interdiction. On the other hand, one must remember that the Air Force selected their own interdiction targets and there was little if any coordination with army planners.<sup>132</sup> Again, the need for a commander to unify operational planning at Salerno was demonstrated.

The Salerno operation was, as General Clark described it, a near disaster. On 12 September, General Clark records in his book, Calculated Risk, German counterattacks were developing and he no longer had a reserve to meet an enemy breakthrough. In fact, he commented that, "I had to consider the possibility of being driven back into the sea."<sup>133</sup> General Clark even made plans for evacuating the VI Corps from the southern sector to the British X Corps sector where their beachhead appeared to be holding.<sup>134</sup> But, naval gunfire as well as excellent air support (which had to be diverted to Salerno by General Eisenhower) and reinforcements from the the 509th Parachute Battalion that was dropped behind German lines turned the military situation around in the Allies favor.<sup>135</sup> In addition, the Eighth Army and 1st Airborne Division were finally making their way northward, threatening to flank General Kesselring's encircled 76th Panzer Corps, commanded by General von Veitinghoff. General von Veitinghoff therefore requested permission from General Kesselring to withdraw. General Kesselring signaled von Veitinghoff to delay Allied forces as best possible while defensive positions were being prepared along the Volturno and Bifurno rivers.<sup>136</sup> The intercept of this signal by Ultra no doubt reassured General Alexander and General Clark that the mission was about to be accomplished. General Kesselring was about to concede the port of Naples by establishing the Volturno Line.<sup>137</sup>

Subsequently, all General Clark's Fifth Army plodded across the mountains and swollen rivers, the German Army punished them severely in a classic type attrition warfare. Interestingly, General Clark's operational planners once suggested an "end run" around the formidable German defensive lines with another amphibious operation.<sup>138</sup> General Clark probably dismissed such ideas quickly because he was concerned about re-creating another near-disaster like Salerno.

The German perception of the tactical situation that evolved from Sicily to the immediate aftermath of Salerno provides additional insight to the circumstances leading to Operation Shingle. The invasion of Sicily and withdrawal of German forces to the Italian mainland caught Kesselring somewhat off-guard. He did not have a contingency plan for defending southern Italy.<sup>139</sup> On the other hand, General Kesselring expected the Allies to continue their attack and probably to conduct amphibious operations. It therefore was a matter of studying possible beachheads, dispersing German forces throughout southern Italy, and requesting additional German forces. The outcome was a sophisticated set of defensive lines that extended across the Italian peninsula and permitted General Kesselring's forces to inflict maximum punishment upon any Allied offensive, while allowing his own forces the opportunity to delay to subsequent well fortified, mountainous, and heavily defended successive lines. His only worry was that the Allies would conduct a bold amphibious operation in his rear area or along the northern coast of Italy. This could cut his forces off and defeat his concept of defense in depth.<sup>140</sup>

On 3 September 1943, the Allies initiated the invasion of southern Italy as General Kesselring's forces started their withdrawal

to the north. Further, as General Clark's Fifth Army landed at Salerno, General von Veitinghoff was overseeing the tactical movement north and was forced to stop and ask General Kesselring what to do next.<sup>141</sup> General Kesselring had no other choice but to instruct General von Veitinghoff to counterattack the Salerno landing because there were still many German units south of Salerno in the process of being withdrawn. One wonders if the Salerno landing would have in fact even been necessary if the Allies had waited a little longer permitting the German forces to move north.<sup>142</sup> But once General Kesselring's containment forces performed so well against the amphibious forces, Hitler began to reexamine his plans to withdraw German forces to the north and decided to approve General Kesselring's proposal that a war of attrition be executed along successive defensive lines. General Rommel disagreed with this decision because he felt that General Kesselring's forces would be continuously vulnerable to amphibious landings like Salerno.<sup>143</sup> General Rommel was justified in this concern because Operation Shingle nearly succeeded in isolating General Kesselring's forces in southern Italy in 1944. However, this likelihood was not ignored and General Clark would discover at Anzio that General Kesselring had prepared contingency plans for just this possibility.

A brief examination of some of the key decisionmakers at Salerno and later at Anzio can further explain some of the problems that occurred prior and during Operation Shingle. Although personality differences among military leaders should not ideally interfere with the execution of their mission, realistically they exert a powerful influence. This is compounded in the conduct of combined operations by differing national views of tactics and operations as well as parochial

## THE ALLIED CHAIN OF COMMAND

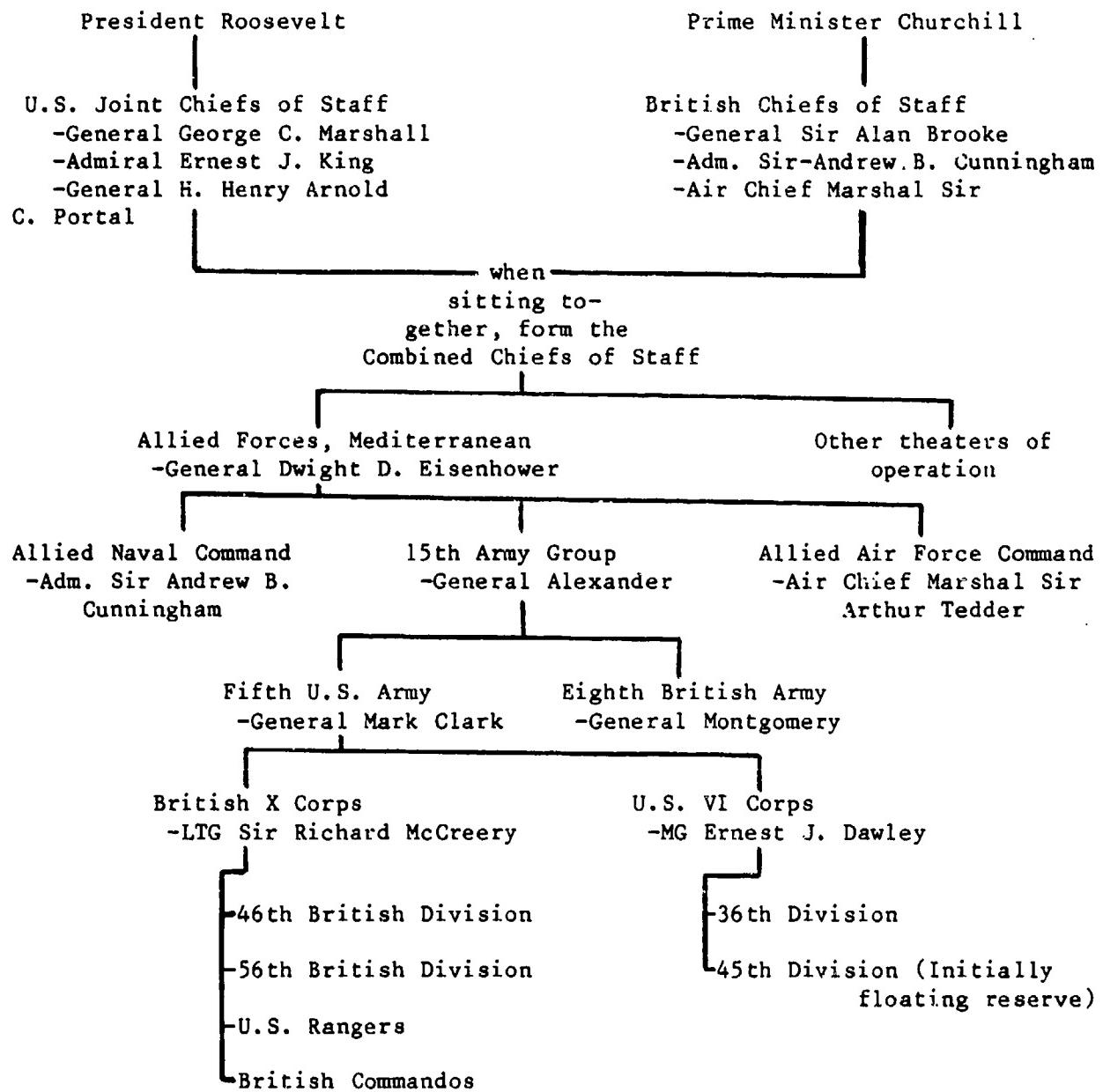


Figure 3-5

This was the chain of command on the eve of Operation Avalanche. Vice Admiral Hewitt would be the Commander of Naval Forces assigned the task of transporting the Fifth Army to Salerno and MG Edwin J. House, Commander of the U.S. XII Air Support Command would be responsible for air operations at the assault area.

nationalistic jealousy. The Combined Chiefs of Staff (figure 3-5) assisted immeasurable in controlling differences between leaders of the United States and Great Britain. Dual representation of key theater and army group staffs also helped to alleviate the problem. Nevertheless, jealousy, misunderstandings and differences of opinion prevailed among commanders. Therefore, it is important to have a general understanding of the following key individuals:

1. General Eisenhower: He was of Swiss and Bavarian Mennonite descent. In 1915 General Eisenhower graduated from West Point and was assigned to the Nineteenth Infantry Regiment at Fort Sam Houston, Texas. As a major, General Eisenhower was assigned to several important positions that prepared him well for future high level responsibilities. For example, he was assigned to the office of the Assistant Secretary of War in 1929, and he was an assistant to the then Army Chief of Staff - General Douglas MacArthur. Later, as a lieutenant general, he commanded the Allied invasion of French North Africa. His tactical military successes and ability to smooth over inter-Allied rivalries led to his appointment as commander of the Supreme Headquarters Allied Expeditionary Forces in Europe which was responsible for Operation Overlord. He had some weaknesses, though. As he entered World War II, General Eisenhower knew almost nothing about intelligence. He came out of the war as a highly sophisticated and effective user of Ultra and other intelligence collection techniques. His friendship with General Mark Clark, which dated back to their days at West Point, survived the tumultuous situations during World War II that included an occasional counseling session when General Eisenhower perceived that General Clark was not keeping General Alexander properly informed. For example, a cable that was

formerly classified Secret of 14 December 1943 to General Clark read as follows:

From the Theater Commander (General Eisenhower) to General Clark for eyes only: I have just learned that your recent visit to Sicily was made without giving General Alexander prior notification. I thoroughly understand that this occurred merely through oversight and was not intended as a courtesy to General Alexander but I hope you will take prompt action to assure him that this was the case. These little points of courtesy must be observed with far greater care in an Allied command than in a purely nationalistic one, a point of which I know you are fully aware.<sup>144</sup>

But most importantly, General Eisenhower became a close friend of Mr. Churchill. Possessing the complete confidence of both nation's leaders in the alliance between the United States and Great Britain was important and no doubt facilitated combined operations.<sup>145</sup>

2. General Alexander: Born in Northern Ireland and a graduate of Sandhurst, Field Marshal The Earl Alexander received a commission in the Irish Guards in 1911.<sup>146</sup> In addition to becoming one of the most successful commanders of World War II, he was the most admired soldier in the British Army.<sup>147</sup> Nigel Nicolson, who has become the most reputable biographer of General Alexander, described him as brave, gallant, modest, and professional.<sup>148</sup> In addition, General Alexander's "temperament was calm more than brilliant, his methods persuasive more than forceful, and his contribution to the art of command (particularly of allies) greater than his contribution to the art of war."<sup>149</sup> It was this absence of forcefulness that would eventually bring criticism from Mr. Churchill who believed that General Alexander was not domineering enough at Anzio.<sup>150</sup> Nicolson also quoted Liddell Hart who characterized General Alexander as a "born leader" that might have been a "greater commander if he had not been so nice a man, and so deeply a gentleman."<sup>151</sup> In any event, General Alexander also had Mr.

Churchill's ultimate confidence as developments unfolded Operation Shingle. Later, as General Eisenhower was pulled back to England to finalize Operation Overlord, Mr. Churchill would admit that there was some risk that the overall leadership in the Mediterranean theater would suffer but the tactical situation would remain in the very competent and able hands of General Alexander. General Alexander was acquainted with Ultra in North Africa. His only idiosyncrasy with respect to Ultra was that he did not like to have the results of Ultra reports summarized for him, but instead General Alexander preferred to stand in front of a map and read each one to determine the overall significance.<sup>152</sup> Finally, as events led to the Operation Shingle preparatory phase in early January, General Alexander had a reputation for cooperating smoothly with American officers. He had a way of smoothing over differences between American and British generals that no doubt paved the way for his assignment as Commander of the 15th Army Group. Americans liked him.<sup>153</sup>

3. General Clark: A graduate of West Point in 1917 and commissioned in infantry, General Clark served in several key positions like General Eisenhower. For example, he served on the staff of the Assistant Secretary of War and as General Eisenhower's Deputy Commander-in-Chief during Operation Torch or the invasion of North Africa.<sup>154</sup> General Clark has been described by Martin Blumenson as "aggressive, hard-working, with a flair for public relations."<sup>155</sup> In addition, he impatiently awaited the opportunity to lead men into combat. Although General Eisenhower recognized him as relatively inexperienced in combat (albeit wounded during World War I), General Clark was permitted to command the Fifth Army - initially conceived of as a

training organization but later as the Allies formulated joint military strategy, it became the logical headquarters to command the attack on Salerno and then Anzio.<sup>156</sup> One important factor that General Eisenhower had not overlooked was General Clark's knowledge and training experience in the United States with amphibious forces.<sup>157</sup> This was important because the concept of amphibious operations was in the infancy stage, much less combined amphibious operations during military operations in the Mediterranean theater. But there were also some drawbacks to General Clark being the Fifth Army commander. General Alexander believed that General Clark did not like the British.<sup>158</sup> This may have originated from General Alexander who often gave instructions to division-level commanders directly and visited them for discussions on the operational situation. General Clark definitely did not like General Alexander giving instructions to his Fifth Army subordinates and some degree of animosity consequently developed on General Clark's side. Generally, the British regarded General Clark as extremely ambitious, vain, temperamental and very sensitive.<sup>159</sup> On the other hand, General Clark stressed in his memoirs that he encouraged cooperation and understanding to strengthen American ties with their British comrades.<sup>160</sup> Nevertheless, like General Eisenhower, Mr. Churchill developed a fondness for General Clark while General Clark was stationed in England as the commander of United States ground forces in Europe about September 1942.<sup>161</sup> It was no doubt one reason why Mr. Churchill permitted Winterbotham to brief General Clark on Ultra. With regard to Ultra, General Clark probably had access to this intelligence information in North Africa when he was commander of the United States invasion forces. Nevertheless, like other American military leaders who

were aware of Ultra, General Clark no doubt did not appreciate the value of Ultra until Allied forces prepared for the invasion of Sicily.

4. General Lucas: Major General John P. Lucas commanded a division and corps prior to being assigned to the Mediterranean theater of operations. General Marshall characterized him as having "military stature, prestige, and experience."<sup>162</sup> He was a proponent of using artillery to the maximum during combat operations and this was not a commonly accepted principle during the early days of World War II.<sup>163</sup> He assumed command of VI Corps at Salerno when General Clark relieved Major General Ernest J. Dawley on 20 September 1943. General Dawley appeared to be a victim of battle fatigue and stress. Therefore, General Clark wanted an experienced corps commander who could reestablish leadership of corps operations at Salerno. General Lucas performed well. However, at Anzio, General Lucas would lose faith in Operation Shingle and General Clark would lose faith in him as well. General Lucas was frustrated the entire time that he was VI Corps commander by the strong suspicion that Fifth Army was not giving him all the available intelligence on the enemy. This was in fact true because General Lucas was never authorized to read or be aware of Ultra.

5. General Truscott: After six years as a student and then instructor at the Command and General Staff School at Fort Leavenworth, General Lucian K. Truscott was assigned to the General Staff in 1941.<sup>164</sup> In April, 1942, General Marshall sent him to the Combined Operation Headquarters under Lord Louis Mountbatten where he contributed to operational planning of raids such as the famous Dieppe Raid.<sup>165</sup> He was directly responsible for the organization of the American Ranger battalions.<sup>166</sup> He was sent to North Africa to coordinate British, French,

and American efforts to cut Rommel's lines of communication with Tunis. After this task was completed and the Germans evacuated North Africa, General Truscott was assigned as commander of the Third Infantry Division under General Clark.<sup>167</sup> General Truscott subsequently replaced General Lucas as VI Corps commander during the Anzio battle. He worked well with the British. The British had the highest regard for his judgment. Whether or not General Truscott was aware of Ultra in North Africa could not be determined. However, like General Lucas, he would not be authorized Ultra information as a corps commander at Anzio.

6. General Penney: As commander of the 1st British Division that accompanied General Truscott's Third Infantry Division into the beaches of Anzio, General W. R. C. Penney was not an admirer of General Lucas. He had become impatient with the "fumbling direction" of VI Corps and like General Montgomery, General Penney saw no reason to conceal his impatience.<sup>168</sup> Needless to say, he was very grateful to see General Truscott assume command of VI Corps.

In sum, the Allies approached Operation Shingle with a military strategy finally formulated. However, their opponent was less predictable as Ultra portrayed General Kesselring's forces assuming a defensive posture in southern Italy that would make taking Rome difficult in terms of men and material. In addition, the near disaster at Salerno had left its imprint on the Allies and especially General Clark who would be deeply influenced by the Salerno planning at Anzio. Finally, the cast of characters or military leaders looked encouraging at the top but would prove problemsome at the corps-divisional level. On the other hand, combined operations were driven from the top - Mr. Churchill - and another amphibious landing would become obviously needed if the

seemingly impregnable German system of heavily fortified defensive lines were to be defeated.

## CHAPTER 4: PREPARATION FOR ANZIO

On 1 October 1943, Hitler instructed General Kesselring to defend south of Rome.<sup>169</sup> This was an important change in German military strategy and eventually gave birth to Operation Shingle. There were many reasons for the new German strategy and William G. F. Jackson best described the rationale in his book, The Battle for Italy, where he states:

Kesselring's success in saving Tenth Army from what Hitler believed was almost certain annihilation gave him new hope. A successful defence of the Gustav Line south of Rome, where the Italian Peninsula is at its narrowest, would need fewer divisions than the longer Gothic Line between Pisa and Rimini in the north. By holding the Gustav Line he would be able to cover Rome and its airfields, and he would be holding the Allies further away from Germany's back door. The only serious weakness of the Gustav Line was its greater vulnerability to Allied amphibious attack, but winter weather at sea would reduce this danger.<sup>170</sup>

In other words, General Kesselring had performed well in reaction to the Allied landing at Salerno which threatened the survival of the German Tenth Army, located south of Salerno. Therefore, rather than give the Allies southern as well as central Italy, a series of defensive lines as proposed earlier in the year by General Kesselring, now appeared feasible. Successive defensive lines would cause the attrition of Allied manpower and resources, deny Rome to the Allies, and permit an opportunity to avoid a massive German retreat similar to the ongoing situation around Kursk on the Eastern Front. What did the Allies know of this change in strategy through Ultra?

Although the Ultra messages released by the British Public Records Office does not include traffic pre-dating mid-November 1943,

Winterbotham provided some insight to the intelligence situation in October 1943. He stated that Ultra intercepted a message from Hitler to General Kesselring "ordering him to hold the line running eastward, north of Naples, for as long a period of time as possible."<sup>171</sup> It was clear to Churchill that the Germans intended to defend south of Rome rather than withdraw to the mountainous areas in the north. Consequently, Churchill proposed that there be a landing behind the Gustav Line. The objective was Rome.

Churchill described the strategic importance of Rome in the following bombastic terms, "whoever holds Rome holds the title deeds of Italy."<sup>172</sup> Rome was certainly a key location for several reasons. It offered good airfields suitable for Allied heavy bomber squadrons to conduct missions over northern Italy and southern Germany as well as Greece. General Clark recognized the importance of Rome for additional reasons, to include psychological advantages as the Allies were preparing for Operation Overlord in France.<sup>173</sup> Rome was also the focal point of German lines of communications leading into central and southern Italy. Clausewitz might have characterized Rome as the "center of gravity" or most vulnerable aspect of the German defense. If the road network leading in and out of Rome could be controlled, General Kesselring's forces located south of Rome could be isolated and defeated without expending further resources and manpower against the seemingly impregnable German defensive series of lines.

The elaborate system of German defensive lines south of Rome should be briefly examined to appreciate the circumstances leading to Operation Shingle. The Volturno River-Termoli Line and Barbara (figure 4-1) Line as well as the Bernhardt Line were delaying positions that



Figure 4-1

took advantage of rugged defensive terrain to slow the Allied advance.

This permitted more time to construct elaborate observation posts and machine gun bunkers along the Gustav Line. Jackson described the Gustav Line as,

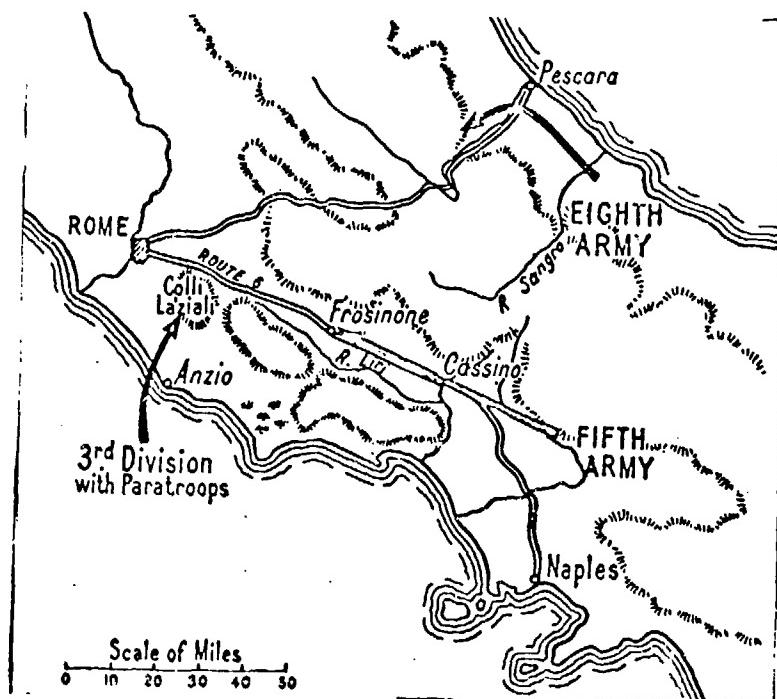
. . . along the Garigliano River and its tributary, the Rapido, to Cassino and then up and over some of the highest features in the southern Apennines until it reached the River Sangro on the Adriatic coast. The main defensive positions were not on the river banks but were well back on the reverse slopes of the hills overlooking the river valleys. The river banks were held by light covering forces, helped by minefields and artillery fire from batteries positioned securely behind hills.<sup>174</sup>

Tunnels and an intricate system of trenches, reminiscent of World War I, connected the strongpoints. Each strongpoint concealed guns and tank turrets. Complicating Allied attacks on this defensive network was the bitter winter weather that brought heavy rains and snow impeding mobility. Thus, there were actually two enemies - the Germans and the weather. Movement along Allied main supply routes was restricted by mud, overflowing rivers, and roads in need of repair, subsequent to German demolition efforts.<sup>175</sup> By the end of October, the nine German divisions which opposed eleven Allied divisions had the effect of eighteen German divisions because the harsh weather and elaborate German fortifications in the mountains provided the Germans tremendous advantages over Allied attacking forces.<sup>176</sup> An "end-run" or amphibious landing behind the Gustav Line appeared absolutely necessary to the Allies because General Kesselring daily continued to strengthen the Gustav Line.

There were actually two plans referred to as Operation Shingle. The first one started on 20 November 1943 and the second commenced on 22 January 1944. In Operation Shingle I, British Eighth Army initiated the attack by attempting to cross Highway 5 in order to threaten lines of

communication of German forces opposing the U.S. Fifth Army. General Montgomery's Eighth Army objective was Avezzano. Phase II of this three phased operation started on 2 December when Fifth Army crossed the Rapido River and attempted to drive up the Liri Valley toward Frosinone and push eventually to Rome. Phase III was to consist of the 3d Infantry Division, commanded by Major General Lucian Truscott, and an airborne regimental combat team conducting an amphibious landing and air drop south of Rome (figure 4-2). The success of this operation hinged upon two developments. Either General Kesselring would acknowledge the hopelessness of his situation when the Gustav Line was penetrated by both Eighth and Fifth armies; or, in concert with this penetration, the amphibious landing and air drop south of Rome would sufficiently threaten his lines of communications such that he would have to withdraw north of Rome.<sup>177</sup>

Whether General Kesselring was aware of Operation Shingle I before the attack started is difficult to determine. However, Ultra revealed some interesting developments during those few days before the operation commenced. First, on 18 November, German aerial reconnaissance was active over Naples, probably to determine the status of landing craft in Naples Bay that could be used for an amphibious landing.<sup>178</sup> Another Ultra message revealed that General Kesselring was replacing some of the German divisions opposite the Allies along the Gustav Line.<sup>179</sup> He considered the 26th Panzer and 29th Panzer Grenadier Divisions ill-suited for employment in positional combat in mountainous terrain.<sup>180</sup> Furthermore, he may have recognized the necessity for a more mobile reserve in case a breakthrough should develop or an amphibious landing occurred on either Italian coastline. Therefore,



\*Figure 4-2 Operation Shingle I

\*Vaughan-Thomas, Wynford. Anzio, New York: Holt, Rinehart and Winston, 1961, p. 9.

he was replacing these units with the 44th Infantry Division and the 371st Infantry Division. The significance of this shift was that the Germans were no doubt vulnerable, at least from a command and control standpoint for a short time. But the problem was a case of Bletchley Park not being able to decode and disseminate the information quickly enough for the Allies along the Gustav Line to exploit this weakness. The date of the message was 11 November and the date of dissemination of this Ultra intercept was 20 November.<sup>181</sup> The unit transfers had probably been already completed by 20 November. On the other hand, this Ultra message was still important because it alerted the Allies that Operation Shingle I would encounter a different type of German opposition--less tank fire but fresh infantry. One other interesting Ultra message on 20 November revealed that four German parachute divisions were being reconstituted in the vicinity of Rome.<sup>182</sup> When and where these units moved was not disclosed by Ultra. However, it certainly made Phase III of Operation Shingle I seem even more risky.

On 20 November, Eighth Army started Operation Shingle I under difficult circumstances. The success of Phase I depended upon the Sangro River and tributaries being fordable. But, on 23 November, floods swept away three bridges across the river. The depth of the rivers varied daily according to the unpredictable weather. Some units were able to cross the Sangro River and then others, such as the New Zealanders, were cut off by rising flood water. The low ceiling or visibility also compounded Eighth Army's frustration because it adversely affected artillery, armor, and aircraft supporting fires. Finally, on 6 December General Montgomery's Eighth Army's attack stalled.<sup>183</sup>

Meanwhile, General Clark's Fifth Army initiated Phase II on 2 December, but discovered that it could not even reach the entrance to much less drive up the Liri Valley. Bad weather seriously affected Fifth Army operations much like those of Eighth Army. In fact, the rising flood waters even isolated many German units whose improvised bridges forced them to abandon equipment and swim across parts of the Garigliano River. By 10 December, General Clark realized that he was suffering too many casualties for minimal gains. The Tenth British Corps, under General Clark, for example, lost over 1,000 men during the 2-10 December attack. Therefore, Phase II of the operation halted.<sup>184</sup>

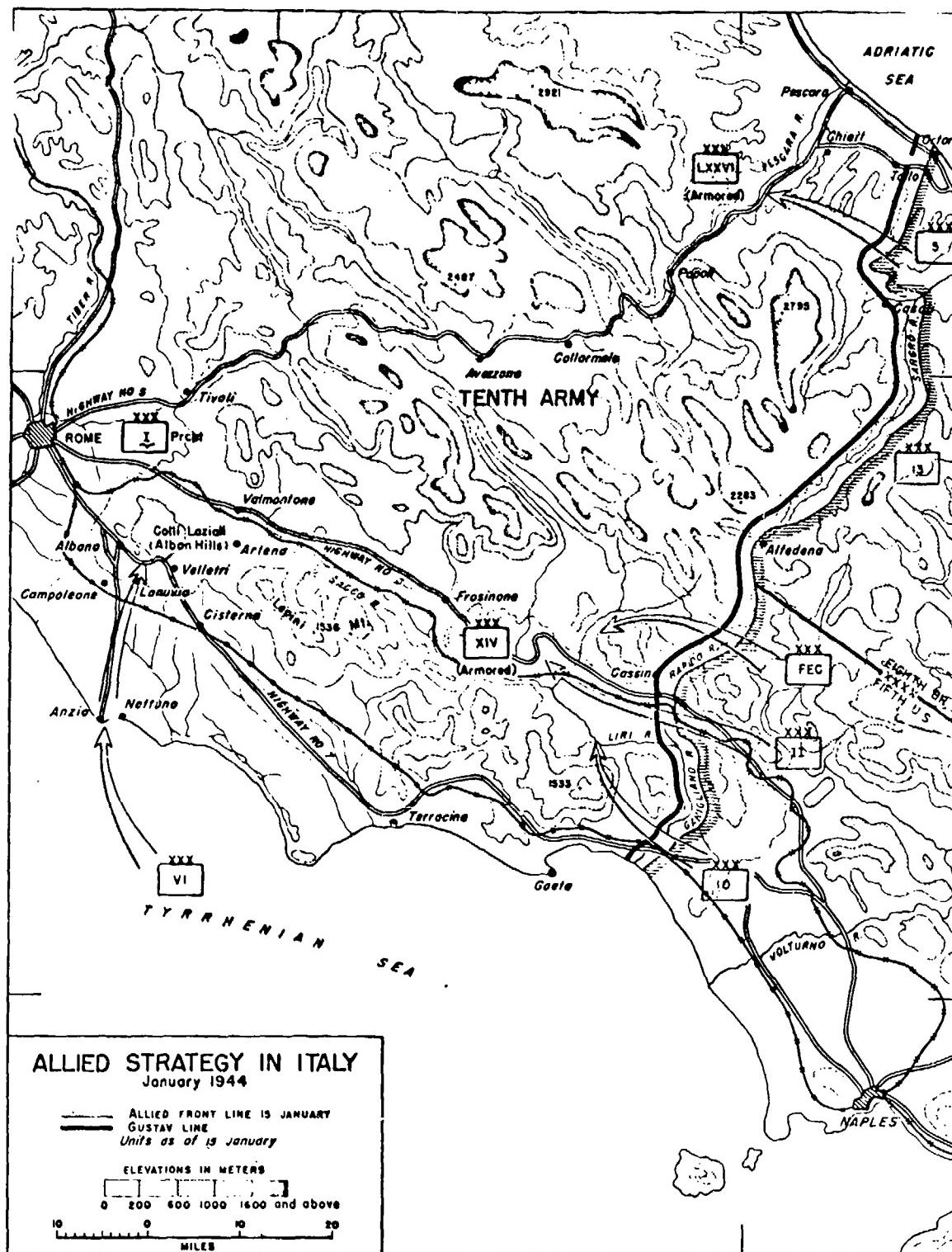
One might have expected Phase III, the attack south of Rome, to be automatically cancelled. The original concept, after all, in General Alexander's directive "had assumed that the amphibious landing operation would not take place until the main Fifth Army forces were within supporting distance, that is, in the vicinity of Frosinone."<sup>185</sup> But, on 10 December, General Truscott discovered that this assumption had changed. Now, Phase III was expected to go ahead anyway. General Truscott recalled General Clark explaining that merely holding a beachhead at Anzio would cause the Germans to withdraw from the southern front.<sup>186</sup> Truscott was not as optimistic and told Clark that continuing such an operation would sacrifice the whole division. No doubt the possible destruction of an entire division weighed heavily in General Clark's mind. Also the imminent likelihood of insufficient landing craft to sustain the Anzio beachhead was becoming a bigger problem. The Combined Chiefs of Staff had approved General Eisenhower's request for Clark to keep the landing craft a little longer, but 15 January was the

deadline.<sup>187</sup> General Clark did not believe that this was enough time to support Phase III and the operation was therefore cancelled.<sup>188</sup>

General Alexander was dissatisfied with the situation and proposed to Churchill that if the Allies truly wanted Rome before Operation Overlord commenced, then they should land a larger force. Such a force would be capable of sustaining itself until Eighth and Fifth armies could eventually penetrate the Gustav Line and breakout towards Rome.<sup>189</sup> Of course more landing craft would be required to land a two-division size or larger force, but it was the only practical way to attack successfully General Kesselring's rear area. Churchill, who had been in Tunis several days with pneumonia, consulted with his staff on Christmas eve and managed to meet with General Eisenhower and other American military representatives on Christmas day. Churchill explained General Alexander's idea and stressed that the Allies could not afford to be heavily committed in southern Italy in the spring when the invasion of France was scheduled to commence. Therefore, it was agreed that Operation Shingle II would be planned to speed up the Italian campaign, secure Rome, and thereby release resources for the invasion of Normandy.<sup>190</sup> Releasing resources for Operation Overlord was important to General Eisenhower. Moreover, supporting the high ammunition consumption rates as well as the high casualty rates along the Gustav Line did little to accomplish his preparation to cross the Channel. Furthermore, if Rome could be secured, fewer Allied forces would be required merely to defend north of Rome, thus releasing some of the Allied divisions for use in the invasion of France. Therefore, the new operation or Operation Shingle II appeared desirable to all.

This time Operation Shingle was not as dependent upon Eighth and Fifth armies. However, both armies were expected to increase pressure along the Gustav Line in order to force General Kesselring to commit his reserve located in the vicinity of Rome, well within striking distance of the Anzio beachhead. Ultra reported this reserve to be a two division-size force under the command of the German 1st Parachute Corps.<sup>191</sup> Radio intercept operators were no doubt expected or tasked to target General Kesselring's headquarters' command net very closely during early January and right up to H-hour to determine if the German reserve had been moved out of Rome. The success of Operation Shingle II would depend upon surprise and General Kesselring's forces being completely committed at the Gustav Line.

Once the amphibious force landed at Anzio, the objective was to convince General Kesselring to withdraw German forces from southern Italy or risk isolation and entrapment as the Anzio force secured the Alban Hills (figure 4-3) which controlled the two most important roads leading north from the Gustav Line.<sup>192</sup> On the other hand, General Alexander accepted the possibility that General Kesselring could divide his forces between Anzio and the Gustav Line; but, Allied planners agreed that this would either permit a breakthrough at the Gustav Line or allow the Anzio invasion force the opportunity to seize Rome and its important road network.<sup>193</sup> In the short term, General Kesselring did divide his forces by withdrawing several units from the Gustav Line and redeploying them against the Anzio beachhead. It was the long term effects that General Alexander's planners had not expected, specifically the rapid movement of German divisions from the north. This, then, was



\*Figure 4-3

\*John Bowditch, Anzio Beachhead. Washington, D.C.: U.S.  
Government Printing Office, 1947.

the general thrust of Operation Shingle II. The question is why did it fail?

One of the more popular explanations for the failure of Operation Shingle II is that General Clark did not appreciate, read, or understand Ultra. Some critics have mentioned General Clark's inexperience as a commander in a combat theater.<sup>194</sup> Still, others cite General Clark's basic insecurity about another potentially disastrous situation like Salerno developing whether his forces would be left high and dry on the beachhead after the British navy withdrew all landing craft for Operation Overlord.<sup>195</sup> Undoubtedly a combination of all these factors was present in Clark's decision-making, as were other considerations. An analysis of the operations plans and meetings that led to the Anzio landing will place the operation in context and illuminate General Clark's controversial role.

At the outset, the objective and stated mission of Operation Shingle II was not clear. Historians and other writers contend that General Alexander's intentions and General Clark's orders differed significantly. General Alexander's 15th Army Group operations order specified that:

The U.S. VI Corps would land some sixty miles behind the German lines, cut off the main German supply routes, capture<sup>196</sup> the Colli Laziali, and throw the enemy into a complete route.

The VI Corps Operations Plan restated the mission as received from Fifth Army as follows:

- a. To seize and secure a beachhead in the vicinity of Anzio.
- b. Advance on Colli Laziali.<sup>197</sup>

It is difficult to explain how General Clark reoriented the intent of Operation Shingle II and got away with it. He explained in his book,

Calculated Risk, that British intelligence was sometimes overly optimistic "to hearten the troops."<sup>198</sup> Furthermore, "their estimate of the Anzio situation was deliberately made optimistic because it was shaped to fit the decision already made at Tunis" by Churchill.<sup>199</sup> But this gave General Clark the license to change General Alexander's concept of the operation remains an unanswered question.

General Alexander, himself, did not clear up the confusion over the mission statement and overall concept of operation. Instead, he complicated it further. Although General Alexander always intended that VI Corps seize the Alban Hills (Colli Laziali), he displayed a cautious attitude when he orally briefed General Clark.<sup>200</sup> One can only speculate about General Alexander's reluctant manner. Ultra did reveal that there was sizable German force still in the Rome area consisting of the German 1st Parachute Corps which was a two-division size corps. Possibly General Alexander was reconsidering the options if the Germans were still there on D-day. Regardless, General Alexander stressed that the beachhead should definitely be secured first.<sup>201</sup> General Clark returned to his headquarters, the thrust of the mission was to a penetration into General Kesselring's rear area and securing key terrain that would block his withdrawal. Clark changed it simply to establishing a secure beachhead that would prove to have little value in terms of threatening or persuading General Kesselring to abandon the Gustav Line.

Interestingly, Major General John P. Lucas, VI Corps Commander, personally received the Fifth Army Operations Plan from Brigadier General Donald W. Brann, General Clark's G-3. On behalf of General Clark, General Brann explained to General Lucas that the primary mission was to seize and secure a beachhead; if the opportunity later permitted

the seizure of the Alban Hills, General Lucas could make the decision to advance farther.<sup>202</sup> This was not only the unorthodox delivery of an OPLAN to a Corps commander but also delivery of a mission analysis and restated mission that normally is accomplished at the subordinate command level - in this case corps. This trip by General Brann and discussion was undoubtedly an indication of General Clark's uneasiness with Operation Shingle II.

Several years after World War II, General Clark explained some of his doubts about Operation Shingle II when he stated:

There was no possibility of going ahead and capturing the Alban Hills in the face of the concentrated troops that were ordered to meet us and did meet us.<sup>203</sup>

General Clark was reacting to Ultra messages which portrayed German awareness of an imminent amphibious landing. For example, an Ultra intercept revealed on 10 January 1944 that the General Kesselring was aware that the Allies were,

. . . pushing ahead with intended landing operations on both coasts of Italy with all available forces in the Mediterranean. Expected date approximately 15 January.<sup>204</sup>

General Clark was also responding to his experiences at the Salerno beachhead where he gained a new appreciation of the highly mobile German troops who moved rapidly, often at night to avoid air interdiction, to the beachhead area. They would be expected to do again at Anzio. Thus, General Lucas recalled that General Clark told him on D-day:

Don't stick your neck out, Johnny. I did at Salerno and got into trouble.<sup>205</sup>

In addition, General Clark shared General Alexander's uncertainty as to the German reaction to increased pressure along the Gustav Line. Would General Kesselring commit his reserve in the Rome area? Although not

stated as such anywhere in plans or orders, this question formed the basis for Fifth Army's Essential Elements of Information (EEI) and by virtue of this question being unanswered, anxiety surfaced in General Alexander's and General Clark's mind that produced confusion over the exact mission of Operation Shingle II. Writers such as Martin Blumeison, contend that General Clark left the mission statement deliberately ambiguous so that he could react to whatever the German response would be to the amphibious landing.<sup>206</sup> Uncertainty was understandable, however it is does not justify making vague mission statements. "Be prepared" type measures or other control measures could have been included in the Fifth Army OPLAN to counter the German reactions. It definitely would have made the entire operation seem more organized. Instead, General Clark portrayed indecision which can be contagious disease and in the case of Operation Shingle, one that would permeate all the way down to division level. Once ashore, Major General William R. C. Penney, Commander, 1st British Division, commented that he did not know for days what his division was suppose to do next. He characterized General Lucas as indecisive.<sup>207</sup>

If confusion reigned over the mission, the intelligence picture was not to blame. The problem with intelligence was its perishable nature. During most of the planning for Operation Shingle, Ultra and other intelligence sources disclosed that the 1st German Parachute Corps consisting of the 19th Panzer and 90th Panzer Grenadier Divisions, remained in the Rome area. Then, on 17 January (five days before the Anzio landing), Ultra revealed that these divisions had left Rome to be committed on the Gustav Line.<sup>208</sup> This was exactly what General Alexander hoped. Still, writers such as Wynford Vaughan-Thomas, author

of Anzio, did not understand that General Clark was aware of this change in the enemy situation before the landing because when they wrote nothing was known publicly about Ultra.<sup>209</sup> Therefore, quite understandably, many history books portray a misleading set of circumstances.

Martin Blumenson's book, for example, The Mediterranean Theater of Operations, Salerno to Cassino, shows General Alexander's G-2, Clark's G-2, and Lucas's G-2 as expecting heavy German opposition on the beaches as the Allies landed.<sup>210</sup> In fact, General Alexander's G-2 was identified as feeling that the entire operation was ill advised. Admittedly, as Operation Shingle II was developed, it assumed that the "invading forces would meet opposition on the beaches and heavy armored counterattacks within hours of the initial landing." However, this was very perishable intelligence. These G-2's would have probably developed an entirely different intelligence estimate after Ultra revealed movement of the German forces out of Rome on 17 January. But since there is no written record of a change in their estimate of the enemy situation, writers assume that the initial intelligence appraisal of early January was still valid. And, of course, these G-2's could not disseminate a new intelligence estimate showing the movement of the German forces from Rome to the Gustav Line without compromising or revealing their knowledge of Ultra.

Winterbotham, though, certainly insinuates that General Clark either did not see or failed to respond to Ultra intercepts. Winterbotham contends that General Clark did not take notice of Ultra until June 1944 when Fifth Army seized Rome.<sup>211</sup> This portrayal of General Clark has remained through the years and, as earlier mentioned in this thesis, on television in 1975, Winterbotham again stressed it. Nothing is further

from the truth. In particular, one unclassified segment of General Clark's oral biography conducted at the United States Army War College as part of the interviews in the Oral History Program, revealed his feelings about Ultra, as he stated:

We intercepted his (Hitler) mail you know. We had broken his code and were reading it. I had an intercept detachment right there. They were handing me those messages from Hitler, 'blood curdling things.' (Such as) 'Now we have the opportunity of driving him (Allies) into the sea and drowning them and the following troops are ordered to concentrate immediately.' He ordered them from France, from Germany, from up in northern Yugoslavia and got two Jivisions off across from the British front in the Adriatic. And within seventy-two hours we were over-matched there. We knew they were coming. We traced them all the way.<sup>212</sup>

Actually, the wording in the Ultra intercepts was slightly different than Clark recalled. But an Ultra intercept on 1 February 1944 (Appendix G) from Hitler exists and it instructed every German officer and man to fight "until the last enemy is destroyed or driven back into the sea."<sup>213</sup> Other intercepts revealed instructions for German units to move from France, Germany, and the northern Yugoslavia toward the Anzio beachhead.<sup>214</sup> Therefore, there is no doubt that General Clark was aware of Ultra messages, as he stated. But the significance of General Clark's remarks during the oral biographical interview goes even further. He made this statement in 1972. Although Ultra was not specifically mentioned, it was the Ultra system that General Clark described, although at that time it was still considered classified by the British and United States. Not until 1974 did Ultra become public knowledge. So, Winterbotham's accusations against General Clark had not yet appeared. In other words, General Clark was not defending himself to the critics who charged that he ignored Ultra because no one had even disclosed the existence of Ultra in 1972. Nevertheless, General Clark's

statement was an objective account of the situation and indicative of his appreciation of Ultra. Conversely, some might interpret General Clark's remarks to mean that the results of Ultra intercepted messages worried him considerably. General Clark was definitely not as concerned about securing a beachhead during the initial hours of the landing as about the overwhelming German force that was enroute to counterattack his beachhead. His vision of Anzio turning into another Salerno or worse may have inhibited his command decisions.

The estimated buildup of enemy forces in the VI Corps Intelligence Annex was very accurate. General Truscott commented in his book, Command Missions, which was a personal story of his experiences in Italy, that "locations of every German division in Italy and others capable of interfering were known up to the time of mounting the operation."<sup>215</sup> Since Ultra intelligence information was not disseminated below corps level without being sanitized (made to look like it was collected from a different source), General Truscott did not know that Brigadier Terrence Airey, the British Director of Intelligence, at General Eisenhower's Middle East Command Headquarters, in Caserta, had developed this information from Ultra. As Ronald Lewin explained in his book, Ultra Goes to War:

From their intimate knowledge of the German order of battle which Ultra in particular provided, General Airey and the intelligence staff at Caserta constructed a table which set out, with what proved to be remarkable accuracy, the scale of German opposition to be expected on the D Day beaches and the daily rate of enemy reinforcements that might reach Anzio.<sup>216</sup>

Of course, there is no evidence to confirm that General Clark or other Ultra-knowledgeable individuals realized that the information provided

by General Airey to the VI Corps Intelligence Annex originated from Ultra intercepts either.

On the other hand, Ultra revealed General Kesselring knew the identification and location of each of the fifteen Allied divisions just prior to the Anzio operation. In addition to describing each division of the Tenth British, II British Corps, and VI U.S. Corps on 7 January, the intercept also described American units in Sicily.<sup>217</sup> It must have been unsettling to General Clark to know that General Kesselring knew so much about Fifth Army. It also must have been difficult to impress subordinate commanders with the accuracy of intelligence when they were not privy to Ultra intercepts. For example, General Truscott was very critical of the Fifth Army G-2 intelligence summary published on 16 January.<sup>218</sup> This summary indicated that German forces were experiencing large numbers of casualties and might have to withdraw from the Gustav Line. General Truscott considered this analysis to be wishful thinking. But Ultra intercepts revealed that General Kesselring indeed was experiencing heavy casualties. For example, an intercept on 9 January revealed that the 44th Division's two committed regiments had been in heavy fighting and it was reported to General Kesselring's Tenth Army that "casualties must be described as heavy."<sup>219</sup> If General Truscott had been aware of this Ultra information, he might have been less critical of the estimates of the Fifth Army G-2. But the source of Fifth Army G-2's assessment of recent heavy German casualties could not be revealed to General Truscott.

Major General John P. Lucas, VI Corps Commander, indicated in his diary for 10 and 21 January that "the very high command had informa-

tion about German intentions that was not available to him nor his staff."<sup>220</sup> He was absolutely right. There is no indication in his diary that General Lucas ever complained to General Clark; however, it definitely made General Lucas feel uneasy. Thus, General Clark had an army of commanders who did not have an accurate knowledge of the real enemy situation. It is hard to draw inferences from this tactical situation but several questions arise. For example, if General Lucas understood the enemy situation completely, would he have expanded the beachhead sooner? Would General Lucas have placed a reconnaissance element on top of the Alban Hills immediately after the initial landings? Would it have been possible to ambush or attack some of the German forces that were approaching the Alban Hills or beachhead area during the first few days after the landing? These questions will never be answered; however, there is one certainty - it is difficult to plan offensive operations when portions of enemy intelligence information can not be released to the operational planners and tactical commanders because of the risk of compromising sensitive sources.

Historical accounts of Anzio emphasize that the Allies achieved complete surprise but this was not really the case. Ultra revealed that the German High Command suspected an imminent amphibious landing somewhere. One Ultra intercept on 7 January stated the following:

According to Luftflotte 2 Intelligence (the) evening of 7th (January) Italian peasants aware from Allied pilot shot down near Vicenza on December 28th that Allies intended landing in Venice area. The value of the information was to be assessed with caution. Secondly, according South Adriatic Command on 7th, Italian officer escaping from communists had reported that members of British Military Mission were speaking of a landing in January. Points of attack: Prevenza and Valona; small Zervas operations are to tie down German forces when time comes.<sup>221</sup>

How the Germans acquired this information can not be determined from Ultra. Viewed in isolation, the information in this intercept might ordinarily be discounted as rumors of the most unreliable kind. However, there were other indications that an amphibious landing. Another Ultra intercept revealed on 14 January that German agents reported "an Anglo-American landing intended the night of the 23d or 24th of January" was being planned, possibly in Italy or Greece.<sup>222</sup>

The increased availability of landing craft in the Italian Theater became an item of interest to the Germans. The Germans tracked Allied convoys very closely in the Mediterranean area (figure 4-4). Ultra revealed numerous examples of aerial reconnaissance reports transmitting Allied naval order-of-battle information to Hitler. A few of these intercepts are especially informative. For example, an intercept on 12 January stated as follows:

Information in hands of German Mediterranean Naval authorities forenoon (of the) twelfth (of January): Naval vessels which left Gibraltar night of the fifth to sixth are bound for Gulf of Taranto calling at Algiers and Malta (figure 4-5). On arrival, they are to await four smaller units which left Gibraltar between eighth and tenth. The aircraft carrier is remaining in the Sicilian waters. Large convoy to leave Gibraltar between twelfth and fifteenth for Barletta carrying English troops whose equipment suggests that they are intended for landing operations . . .<sup>223</sup>

Then, Ultra disclosed another message emphasizing German concern over an imminent amphibious operation of 15 January and this intercept included the following:

Orders by German Air Force Southeast for fourteenth (January): Fliegerkorps Ten. Photograph/reconnaissance Port Said for concentration of Allied naval forces, (especially aircraft carriers) and landing craft formations. All high altitude <sup>JU</sup> 88 (aircraft) to operate, if necessary several times . . .<sup>224</sup>

There were a multitude of other Ultra messages during the period 8-20 January discussing aerial targeting of Allied naval forces. But the im-

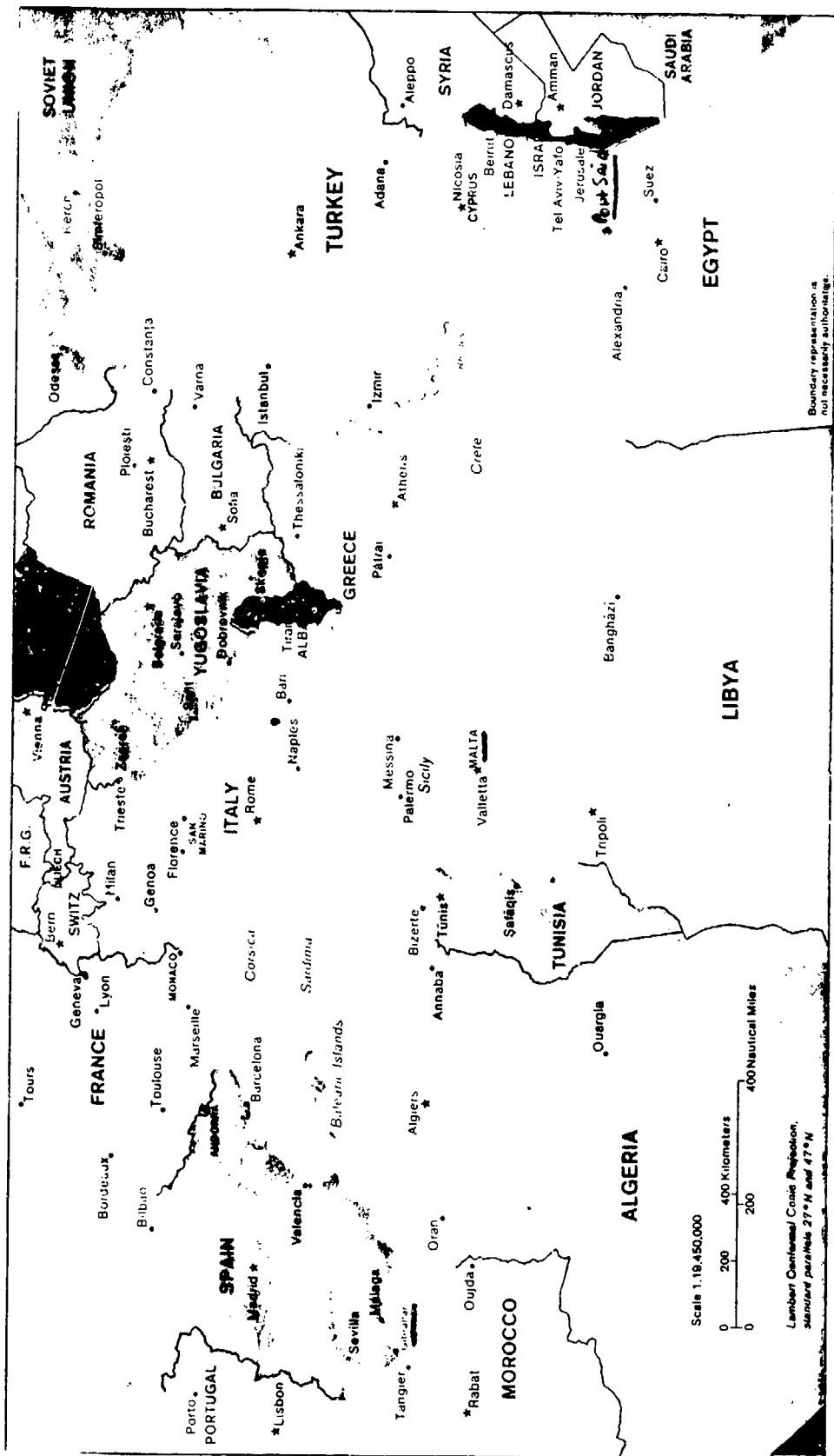


Figure 4-4



portant consideration to be gleaned from these Ultra intercepts was that the Germans anticipated an amphibious landing. As mentioned earlier, Ultra had also intercepted a message on 10 January which revealed the following:

GNC Italy learned on ninth that, according report of Abwehr Paris of third (January), Wilson, pursuing plans of Eisenhower, was pushing ahead with intended landing operations on both coasts of Italy with all available forces in Mediterranean. Expected date approximately 15 January.<sup>225</sup>

In other words, as General Eisenhower departed for England to plan Operation Overlord and General Sir Henry Maitland Wilson assumed duties as Supreme Allied Commander in Chief in the Mediterranean, an amphibious landing was a certainty to the Germans. The important questions remaining for the Germans was where and when would the Allies conduct such an operation? After World War II, some of General Kesselring's staff officers were interviewed by representatives of the United States Army's Information Office. One of their major points was that,

The German Command considered the areas of Genoa, Livorno, Rome, Venice, and Istria to be the most probable objectives for a landing operation. The Rome area was of the greatest importance because a landing in that coastal sector would have cut off the German 10th Army from its communications with the rear which would have probably caused a rapid collapse of the southern front.<sup>226</sup>

Consequently, as these German staff officers continued to explain,

As the indications that the Allies were preparing a landing operation became more convincing, the German High Command decided in the beginning of January to interchange the 3d Panzer Grenadier Division and the stronger and more efficient 90th Panzer Grenadier Division. The latter was to be brought up from<sup>227</sup> the Adriatic coast. This regrouping began about 10th (January).

Ultra had reported that the 90th Panzer Grenadier Division was expected to move to the Rome area. The intercept stated:

Panzer Grenadier Regiment 200 arrived (as part of 90th) in the area north of Rome according to Kesselring's Sitrep of fourteenth (January). Comment: 90th Panzer Grenadier Division, formerly in the line on Adriatic coast was finally relieved on twelfth January.

Only previous evidence of destination of this division was that elements were leaving for Rome area on eleventh to twelfth.<sup>228</sup>

But the German staff officers also stated that "the surprisingly early opening of the Allied offensive against the Gustav Line on 15-17 January completely changed the situation and prevented the German Command from carrying out its plans." This was particularly the case with respect to the 90th Panzer Grenadier Division, a highly mobile unit, moving to protect the Rome area from an amphibious landing - whether that landing was north or south of Rome.<sup>229</sup> This certainly complements an Ultra intercept of a German 10th Army Day Report on 20 January which stated that the "90th Panzer Grenadier Division had been subordinated to the 94th Infantry Division in the 14th Panzer Corps" then deployed along the Gustav Line.<sup>230</sup>

There had been other indications that General Kesselring was committing all his available units, to include the two divisions in the vicinity of Rome, as other Ultra intercepts were decoded. For example, on 18 January, one Ultra message read as follows:

By Hitler's Order, the bulk of the western battalions in sphere of command of CINC-SW (Kesselring) to be employed on development of the Fuehrer's switch line, the Foro position.<sup>231</sup>

The "Fuehrer's switch line" was the Hitler Line or a short line of defensive positions approximately six miles behind the Gustav Line and opposite the II (US) Corps on the western side of the Italian peninsula (figure 4-1). This defensive line was intended to prevent the Allies from moving up the Liri Valley before the Germans withdrawal to the next defensive and well fortified series of strongpoints referred to as the Caesar Line. Another Ultra message disclosed the contents of a 10th Army Day Report for 20 January which stated:

1. 90th Panzer Grenadier Division had been subordinated to the 94th Infantry Division in 14th Panzer Corps. 2. Intentions were for I Parachute Corps to take over operational command at 0900 hours on 21 January, its eastern boundary to be the old western boundary of 15th Panzer Grenadier Division. Task of the Parachute Corps to be regaining of old main defence line (Gustav Line), and for this purpose 90th Panzer Grenadier Division to be subordinate to it.<sup>232</sup>

Thus, movement of the 1st Parachute Corps headquarters away from Rome left the Anzio-Rome area essentially denuded of any effective German combat resistance to Allied forces participating in Operation Shingle II. Only two weak battalions of the 219th Panzer Grenadier Division remained south of the Tiber River in a position to oppose VI Corps.<sup>233</sup>

Therefore, consider the influence that Ultra may have had on General Clark during those few weeks before the Anzio landing. Not only was it apparent that the Germans expected an amphibious landing, but Allied naval vessels were being closely monitored by German reconnaissance aircraft to determine where and when the landing would occur. Although some measure of reassurance could be accepted as Ultra revealed to General Clark that General Kesselring had taken 'the bait' or committed his reserve in the vicinity of Rome to the Gustav Line, the possibility still remained that some of these units could be redeployed back to Anzio.

Increasing pressure along the Gustav Line was, of course, one measure intended to deceive General Kesselring that an amphibious landing was about to occur. General Clark's decision to move the first wave of the amphibious landing force from Naples to Anzio during hours of darkness was also a form of deception. Anthony Cave Brown described another deception effort in his book, Bodyguard of Lies:

It (Allies) had employed what was by now a familiar trick: wireless broadcasts to resistance forces and agents in Italy using a cipher it was known the Germans could read. . . . the signals warned the

recipients that an invasion was imminent not at Anzio, but at Civitavecchia, a town on the coast north of Rome.<sup>234</sup>

Ultra did not reveal any information to verify whether or not the Germans believed the deception story. Since no troop movements ever occurred, the Germans apparently discounted the credibility of these signals and preferred to rely on their aerial reconnaissance reporting to warn them of an actual imminent amphibious attack.

General Kesselring had a contingency plan referred to as "Case Richard" which consisted of rear echelon troops, such as antiaircraft personnel stationed along the coast, replacement units, engineer units, and other rear area support units being organized into reaction

forces.<sup>235</sup> In other words, all would fight as infantry to contain the invader until maneuver units could be sent to the beachhead area. Actually, "Case Richard" was part of a larger German High Command contingency plan to meet an emergency, such as an amphibious landing, by sending forces from northern Italy and southern Germany to augment whatever forces General Kesselring could release along the Gustav Line.<sup>236</sup>

In addition to this contingency plan, General Kesselring ordered emergency alerts throughout Italy between 18-20 January. He could not obtain the cooperation of the German navy, as one Ultra intercept revealed:

On subject of possible large scale landing, naval war staff decided on nineteenth not to order setting up of alarm units . . . as they considered shortage of personnel such that every member of the navy must be employed in naval duties.<sup>237</sup>

Ironically, General Kesselring's staff persuaded him that it would be advantageous not to have a stand-to or emergency alert on the night of 21-22 January (the night the Allied forces moved to Anzio) because the constant alert status was wearing down the troops.<sup>238</sup> Nevertheless, it

should be understood that General Kesselring recognized that an Allied imminent amphibious landing was being planned and he was aware also that he was taking a calculated risk by moving the preponderance of his forces to the Gustav Line. His assumption, though, was that the Allies would not attempt an amphibious landing if the Gustav Line could not be penetrated.<sup>239</sup> Thus, complete surprise did not characterize the circumstances as General Lucas' VI Corps waded ashore unopposed. Instead a measure of tactical surprise was achieved because the timing of the invasion was unexpected by the Germans.

If Ultra information was giving General Clark an accurate appraisal of General Kesselring's intentions and deployments, and if a deception effort had been improvised to conceal the location of the Allied landing, what other factors influenced General Clark's plans for the D-Day operation? To answer this question, a discussion of the execution of the VI Corps OPLAN is necessary. In the development of the OPLAN, Fifth Army had made the following assumptions:

1. There would be adequate air interdiction of railroads, bridges, and lines of communications to slow German units sent to the Anzio beachhead area;

2. The VI Corps would consist of two divisions, one American and one British;

3. There would be sufficient landing craft to support the operation, to include sustaining the two divisions ashore; and,

4. The operation would occur between 20-31 January and as near possible to 20 January.<sup>240</sup>

These planning assumptions need to be examined to understand the problems and circumstances that existed just prior to the Anzio landing.

For instance, the Allied air forces were expected to destroy key choke-points in German lines of communications to isolate approaches to the beachhead area.<sup>241</sup> This was not a new tactic. General Clark explained in his book, Calculated Risk, that it was planned prior to Operation Avalanche (the Salerno landing) too; however, as stated earlier in chapter 3, it did not achieve the results General Clark desired. He stated:

We gave the theory (air interdiction) a good try, Allied bomber worked over the enemy communication lines for many weeks and, finally, for months and even years. The Brenner Pass, the tunnels, the bridges were battered steadily, but the theory was a complete flop. The Germans kept right on increasing their strength in Italy until the very end and were able <sup>242</sup> battle us for every foot of Italian soil.

General Eisenhower stated in a message to the Combined Chiefs of Staff on 21 September 1943 that an important lesson had been learned at Salerno. It was:

. . . during the critical stages of a landing operation every item of available force including land, sea, and air, must be wholly concentrated in the support of the landing until troops are in position to take care of themselves. <sup>243</sup> This most emphatically includes the so-called strategic air force.

The Allied strategic air force had been targetting deep targets or lines of communication during the Salerno landing and air support had to be redirected to help the amphibious landing which was on the verge of disaster during the initial few days ashore. General Clark no doubt recognized that neither he nor General Alexander would have any control over the Allied air forces during Operation Shingle and apprehension over its effectiveness would surface again. Whether General Clark discussed this issue with General Alexander or General Eisenhower cannot be determined.

The Anzio invasion force was to consist of one American and one British division. This second planning assumption might seem less con-

troversial and, yet, a combined corps was one reason why General Eisenhower became increasingly more uncertain of the wisdom of Operation Shingle. In a personal letter to General Alexander, General Eisenhower stated on 29 December 1943:

I have been thinking over Operation Shingle and, in particular, your telegram which gave me to understand that you intend to employ one British and one U.S. division. The disadvantages of employing a mixed corps are of course as obvious to you as to me. These disadvantages are particularly applicable to this operation which has to be self-contained as regards maintenance.<sup>244</sup>

General Eisenhower recognized that there would be increased supply requirements based upon different equipment and spare parts. Also, he was concerned that the British Division was only at two-thirds strength.

General Eisenhower stated further in his letter to General Alexander:

I have wondered whether or not you may have been influenced by either of the following factors:

a. That you felt it undesirable, because of the risks involved, to hazard a corps of two American divisions when you as a British officer bear the deciding responsibility and when the Prime Minister has been such a staunch advocate of the project.

b. That you may have thought it undesirable from a political point of view for a corps of two British divisions to be given the opportunity for the direct capture of Rome.

In my opinion, neither of these two factors should be allowed to outweigh the military advantages of launching your assault by any troops you believe best fitted and most available.<sup>245</sup>

In addition, General Lucas and General Truscott did not want a British division in the scheme of maneuver either. They also agreed that it would complicate resupply efforts as well as possibly be a command and control problem.<sup>246</sup> Exactly what command and control problem meant was not revealed by either general.

General Wilson, who had replaced General Eisenhower as Supreme Allied Commander of the Mediterranean Theater on 8 January, explained the British rationale for the mixed corps.

The reason for assigning a mixed corps for the operation was the lack of time to prepare a corps which would be exclusively a British

or U.S. There were other factors prohibiting the employment of a national formation; should a British corps be assigned, the necessary reshuffle would be so great that it would be difficult to conceal from the enemy; and employment of a U.S. formation would necessitate the withdrawal of a second U. S. division from the Fifth Army front, which would mean a relaxation of pressure where it could be least afforded.<sup>247</sup>

If this explanation by General Wilson is in reply to General Eisenhower's letter to General Alexander, it was written approximately 29-30 December 1943. The Fifth Army's pressure exerted along the Gustav Line did not start until 17 January, therefore it is still questionable whether another American division would really find it that difficult to break away or be replaced. Regardless, the decision had been made by General Alexander for a mixed corps to go ashore at Anzio. General Clark was faced with additional anxieties - would resupply efforts be a problem and would General Lucas as well as General Truscott accept the circumstances by cooperating efficiently with the 1st British Division?

The third planning assumption, that there would be sufficient landing craft to support Operation Shingle, would be the source of much consternation for General Clark too. General Alexander preferred to send a three division-size force in the assault; however, where he intended to get this third division after the debate over a mixed corps remains an unanswered question.<sup>248</sup> In any event, it was far too large a force in terms of landing craft availability and consequently unrealistic. A two division-size force was considered the tactical minimum essential and 88 landing craft would be required to support this force.<sup>249</sup> Yet, only 56 such craft were on hand in the Mediterranean theater. Therefore, additional landing craft would have to be dispatched from the United Kingdom.<sup>250</sup> This was easily deduced but difficult to realize.

The first obstacle to overcome was the combined Chiefs of Staff instructions to General Eisenhower to return 56 landing craft (on hand in the Mediterranean theater) by 15 January which was considered essential to perform the necessary maintenance needed to prepare for Operation Overlord to occur on time.<sup>251</sup> But, 15 January was far too early and the Combined Chiefs of Staff agreed to delay the return of these landing craft until 5 February; but, that still left a requirement for additional landing craft. The whole operation would be on a hazardous logistical lifeline with only 56 landing craft. Finally, it was agreed that sufficient landing craft would be provided from England to General Clark; however, that still did not resolve the return-date problem.

General Clark persuaded General Alexander to request that a minimum of 24 landing craft remain after the 5 February deadline to support the Anzio force. Sustainability was a significant issue and, after much discussion, coordination and conferences, Churchill gave approval to retain 24 landing craft for the month of February.<sup>252</sup> Even this was still not long enough in General Clark's mind. Other factors could complicate the amphibious landing. For example, the British Navy promised only two good unloading days out of seven during the invasion because of winter weather and ships being anchored in the open sea.<sup>253</sup> This meant that part of the invasion force might get ashore and part be obstructed by weather or other circumstances. In the long term, possibly even more than 24 landing craft might be needed beyond February if weather interfered with the invasion for several days or weeks.

The fourth planning assumption was that Operation Shingle would occur between 20-31 January 1944. Several considerations influenced

this desired timeframe. Of course, General Eisenhower and, more strongly the British Navy, wanted to assemble all available Allied landing craft in England as soon as possible for Operation Overlord. Therefore, as close to 20 January as possible would please the planners of Operation Overlord. However, there may have been another important concern about the Anzio-Nettuno harbor area which was crucial for sustaining the invasion force. Ultra revealed imminent plans by the Germans to repair or replace demolitions in this harbor area. The Ultra intercept on 11 January 1944 included the following:

At Nettuno (harbor) demolition changes required renewal owing deterioration through weather. Preparations to be commenced shortly.<sup>254</sup>

Then, on the 16th, Ultra revealed another message on this subject which stated:

Regional commandant at Civita Vecchia requested on fourteenth to discuss with 1st Parachute Corps whether and to what extent partial demolitions of Nettuno and Civita Vecchia harbors can be undertaken now without making the harbors useless for (German) supply traffic.<sup>255</sup>

Finally, on 21 January, as the invasion force was in the final hours of preparation, another Ultra intercept revealed that "on nineteenth, task of preparing demolitions in above harbors (Nettuno and Civita Vecchia) allotted to two technical detachments."<sup>256</sup> The significance of this Ultra intelligence information to General Clark was undoubtedly to abide by the previously decided invasion schedule and, if anything, establish D-Day as close to 20 January as possible. Otherwise, his limited numbers of landing craft might encounter severe obstacles resulting from German demolitions in the harbors preventing him from landing troops and equipment ashore in a timely manner. Furthermore, if the Germans were given additional time, newly emplaced demolitions might destroy docks

and portions of the Anzio-Nettuno port facilities that would be critical for the Allies unloading material to sustain the beachhead.

In combat theaters, commanders perhaps never have as much time as they would like to prepare an offensive operation. Certainly with regard to Operation Shingle, this was clearly the case. Among General Clark's special concerns was the lack of experienced combat troops as well as inadequate time to rehearse for this operation. As General Truscott explained in his book, amphibious operations depend upon complete mutual understanding and whole-hearted cooperation between the landing forces and the British Navy.<sup>257</sup> Therefore, rehearsal was an essential component of a successful operation. Operation Webfoot represented the rehearsal for the Anzio landing. It took place on the beaches of Salerno, 19 January at 0200 hours. General Lucas was ashore evaluating the results.<sup>258</sup> General Lucas and General Truscott characterized Operation Webfoot as "terrible."<sup>259</sup> It revealed the following:

1. Assault battalions landed and prematurely moved inland toward objectives;
2. Few landing craft arrived at the proper beach location;
3. Landing craft disembarked so far out to sea that they arrived at the beachhead late;
4. Artillery and tanks arrived late;
5. In the darkness, DUKW's dumped artillery into the sea (nearly two battalions of artillery); and,
6. The beaches were in chaos as troops arrived ashore.<sup>260</sup>

General Lucas and General Truscott insisted upon another rehearsal. General Clark disapproved the request because he claimed that there was

insufficient time and the decision had been made at the highest level to be prepared to execute immediately the amphibious landing.<sup>261</sup> It is still unclear who specifically made this decision or what General Clark meant by the "highest level." But, the pressure to free landing craft for return to England for the cross-channel invasion and German plans to destroy key harbor locations were important factors.

There were changes to Operation Shingle made by General Clark that would improve his sustainability problems. For example, he decided to load troops and material on landing craft at Naples and transport them directly to the beachhead. This negated the need to transfer troops from British transport vessels to the landing craft further out to sea. This complicated exchange had totally disrupted landing efforts during Operation Webfoot. In addition, he decided to place loaded trucks on the landing craft to facilitate resupply efforts.

This was not a new idea on 22 January. It had been proposed by General Clark's staff officers at the Marrakech Conference on 7 January.<sup>262</sup> The British disagreed with the 'loaded truck aboard landing craft' idea and the proposal was disapproved by Prime Minister Churchill and British Admiral Cunningham whose vessels would support the amphibious landing.<sup>263</sup> Their view of the situation was that, with the unpredictable winter weather, rain and high seas could make it very difficult to land the DUKW's carrying loaded trucks. Furthermore, two offshore sandbars might preclude moving any heavy landing craft (loaded trucks would make the DUKW's significantly heavier) near the shore. Finally, the British Navy was equally concerned that the port of Anzio-Nettuno be captured quickly before the Germans destroyed the port facilities.

Despite the British concern that heavy DUKW's carrying fully loaded trucks might never be able to move close enough to the shoreline to permit disembarkment, General Clark decided to do it anyway. As it turned out, the DUKW's were able to move close enough to shore and the port facilities were not destroyed by the Germans. So the 'loaded truck' idea probably saved the invasion force which would have otherwise ran out of certain types of ammunition and other classes of supply.<sup>264</sup>

The lessons learned from Operation Webfoot, such as disembarking too far out to sea and arrival of units to the beachhead late were avoided by merely loading up in the port of Naples and discharging the cargo at the Anzio beachhead. General Clark was still taking a risk with the weather but, given the season, it was an unpredictable variable anyway. Sustainability was still a concern and, if the British Navy successfully persuaded Churchill to change his mind and bring some or nearly all of the 24 landing craft back to the United Kingdom early, General Clark recognized that he would be in a difficult situation.

Differences between the British and American military officers about loaded trucks being on DUKW's was only one example of problems that developed in a combined operations planning effort. There were other differences too. Complicating the preparations for the Anzio landing were the disappointing Anglo-American military relations in the Mediterranean theater. This was especially apparent in the combined headquarters commands where American officers were "clannish and did not mix freely" with their British counterparts who likewise preferred their own cliques.<sup>265</sup> There were instances of American and British officers trying to "out-do" one another for supervision of sections and petty jealousy.<sup>266</sup> The Americans complained of British superiority and the

lack of common views.<sup>267</sup> The British were also accused of being selfish and obstinate.<sup>268</sup> There was little wonder why General Eisenhower viewed a mixed corps landing at Anzio as being disadvantageous. But, on the other hand, General Clark did not seem to have many of the British-American staff friction problems that occurred at higher levels. This is interesting because from a combined operations standpoint, Fifth Army was the first American headquarters to have under its command large formations of Allied troops. On 7 January 1944, General Clark six British divisions, one Moroccan, one New Zealander, one Indian, and one Canadian division to support his four American divisions. And, if there were differences among military nationalities at the planning level, there seems to be a distinct absence of any discussions of it in British, Canadian, and American accounts of World War II.

Notwithstanding differences within the operational staff at echelons above Fifth Army (15th Army Group and Allied Mediterranean Headquarters), those who worked with Ultra information, to include British and American, cooperated rather well and freely.<sup>269</sup> But this harmonious situation may have existed because there were few American officers aware of Ultra or eligible to know of it.<sup>270</sup> There were some key planners who should have been aware of Ultra intelligence information. For example, Brigadier General Brann, General Clark's G-3, was not authorized to know of Ultra and yet Brigadier (British) Mainwaring, General Alexander's G-3, was eligible to read Ultra messages.<sup>271</sup> This undoubtedly left General Clark's G-3 (Brigadier General Brann) at a disadvantage in discussions with General Alexander's G-3 and provided a basis for aggravated Anglo-American cooperation. It is rarely advantageous for the commander to be provided intelligence that the G-3 cannot

receive to adjust plans accordingly or know why the commander favors a certain course of action, much less not be able to talk to the G-3 of the next higher headquarters with a common basis of understanding of the existing enemy situation. But this was the case in preparation for Anzio.

The chain of command was a breeding ground for difficult Anglo-American relations too. It alternated between American and British commanders from the Combined Chiefs of Staff to division level. But there was another, unofficial, chain of command that followed nationalistic lines. For example, General Alexander regularly communicated with General Brooke, the British Chief of Staff in London, without going through General Eisenhower; and, General Clark often communicated with General Eisenhower without notifying General Alexander. As stated earlier in chapter 3, General Eisenhower attempted to insure that General Clark kept General Alexander notified when these American generals had discussions, but General Eisenhower did not seek to stop General Clark from communicating directly with him. There was therefore acceptance by both nationalities of this chain of command and it did not pose a major problem for General Clark until General Alexander and General Penney began discussing General Lucas, General Clark's VI Corps Commander on the Anzio beachhead. General Penney contended that General Lucas did not inspire confidence in his subordinates and did not know what to do about the situation after the Allies were ashore. General Penney had been General Alexander's Signal Officer prior to assuming command of the 1st British Division under VI Corps. One of the gaps in Ultra-related publications surrounds General Penney's duties as a Signal Officer. Did he know about Ultra? Could it have been possible that

General Alexander discussed Ultra intelligence information with General Penney when General Alexander visited the 1st British Division? It so, it would have been a situation where a division commander knew more about the enemy situation than his superior - General Lucas. But, this is still an unknown set of circumstances, though one to be considered.

In conclusion, as the preparation phase to Operation Shingle ended, General Clark remained uneasy. Ultra intelligence information contributed significantly to his knowledge of German deployments to the Gustav Line. Although it was reassuring to know that the landing would be essentially unopposed, General Clark was concerned about how fast the Germans could react to the landing. Furthermore, it was one thing to have an opportunity to exploit General Kesselring's vulnerable west coast flank, and yet another to have the capability to take advantage of this situation. An Allied force of two divisions, relying on strategic bombings of key chokepoints to slow German counterattack efforts, dependent upon landing craft that the British navy wanted to return to England as quickly as possible, and burdened with the increased logistical problems of a mixed corps as well as less than harmonious relations between corps and division commanders, almost seemed to make Operation Shingle II more than a risk - nearly a gamble in General Clark's mind. Finally, the unpredictable nature of the Mediterranean winter weather that had undermined Operation Shingle I had the potential for seriously disrupting Operation Shingle II.

## CHAPTER 5: ASHORE AT ANZIO

On 22 January 1944, at approximately 0100 hours, the lead assault elements of the British 1st Infantry Division, United States 3d Infantry Division, and the 3d United States Ranger Regiment waded ashore at Anzio, figure 5-1. This significant achievement involved transporting more than 50,000 men and 5,200 vehicles in some 375 naval craft over 120 miles from debarkation at Naples.<sup>272</sup> The entire VI Corps was surprised to find virtually no German opposition to the landing. General Lucas remarked that "we achieved what is certainly one of the most complete surprises in history . . ."<sup>273</sup> General Clark and others who were knowledgeable of Ultra information, recognized the landing for what it really was - tactical surprise of a limited nature but certainly not complete surprise, as discussed earlier.

According to the 10th German Army staff officers interviewed after World War II, General Kesselring was notified of the Allied landing at 0500 or nearly four hours after the beachhead assault commenced.<sup>274</sup> Although in the absence of all Ultra related messages it is difficult to understand the context of some German intercepts, one Ultra message appeared to reveal General Kesselring's explanation (See Appendix I), to the German High Command as to how the Allies moved from Naples to Anzio undetected. The message included the following:

. . . assumed that unspecified W/T (wireless radio traffic) was connected with current supply traffic. Y service did not pick up movement of the landing divisions to ports of embarkation or approach by sea to landing area, since wireless silence was maintained. . . . there were no naval radar apparatuses on the west Italian coast in area south of Piombino. . . . to sum up, the absence of German Abwehr (Intelligence), lack of air and sea reconnaissance, failure of radar, and the concealment of the operation which was strictly

carried out by the Allies prevented a timely recognition of the Nettuno landing operation.<sup>275</sup>

The strangest aspect of this Ultra Signal was that it was transmitted on 2 February. It is difficult to understand why General Kesselring waited so long to provide this explanation to the German High Command. On the other hand, the initial few paragraphs of the German intercept were reported by Bletchley Park as unavailable. As discussed in Chapter 2, very often parts of German messages would be successfully intercepted or decoded. The Allies had to learn to cope with this frustration, particularly in this instance where the initial few paragraphs could have indicated whether General Kesselring was responding to questions from the German High Command, providing a follow-up message, or submitting the results of an investigation by 10th Army.

The precise time that the German High Command was informed of the Allied landing is difficult to assess. The German Naval Command may have been the first to report Operation Shingle II as an intercepted message at 1000 hours to the German High Command stated:

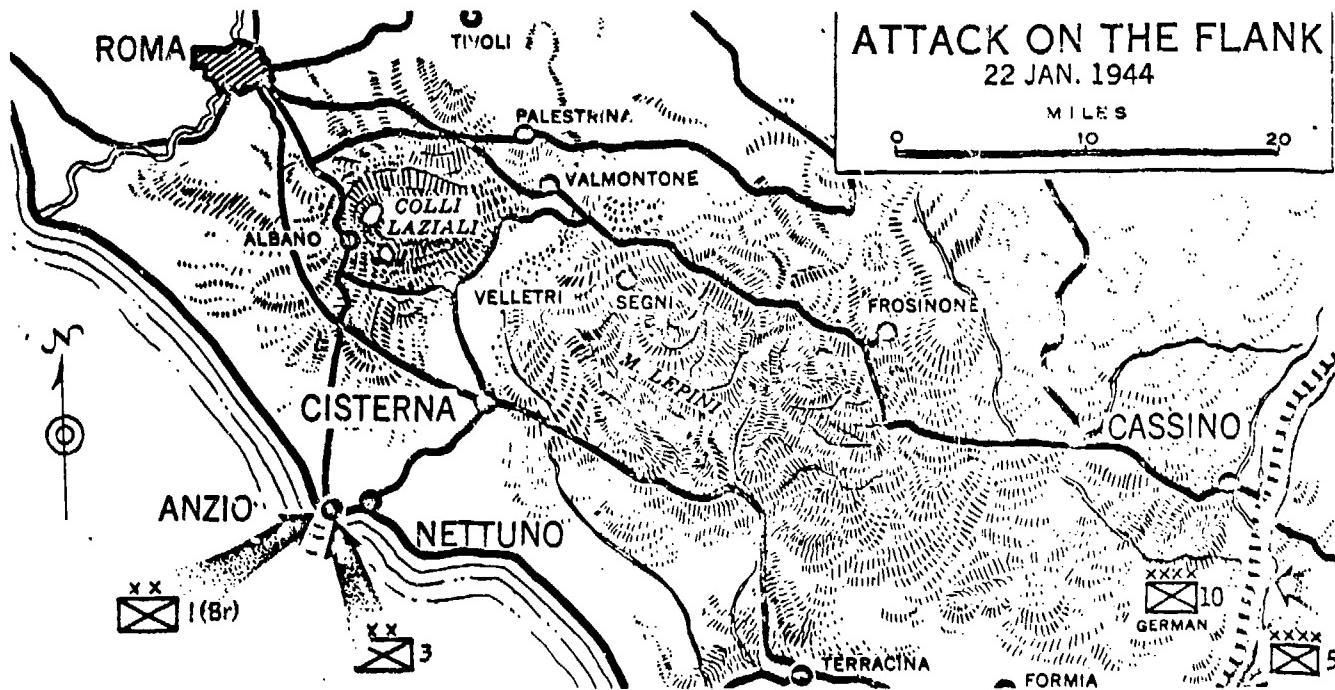


Figure 5-1

GNC Italy aware 1000 hours twenty second that at 0300 hours twenty second presumably<sup>296</sup> one Allied division had landed from 95 landing craft at Nettuno.

Another Ultra message to the German High Command stated:

Strong Allied information landed area Anzio Nettuno 0100 hours according to Flifue intelligence 1100 hours (on the) 22d (January). In whole sea area west of Anzio about 250-300 units. Close inshore about 100 units unloading, including fifteen large transports. Twenty five kilometers west of Anzio further units including destroyers and cruisers. Impression thus gained of large scale landing as at Salerno. Second<sup>27</sup> large landing formation sighted between Anzio and Tiber estuary.

It is difficult to determine if there were earlier messages to the German High Command and Hitler that Ultra radio intercept operators did not successfully identify or Bletchley Park analysts were unable to decode. Nevertheless, a few observations could be made by the Allies from these Ultra messages. First, German intelligence had not performed well in recognizing the timing of Operation Shingle, and secondly, the Germans had a fairly good estimate of the situation at the beachhead by mid-day on 22 January as German aerial reconnaissance began targetting the Anzio-Nettuno area. As notification of the Allied landing filtered into General Kesselring's headquarters, the basic question became what will the Allies do next?

Although the Germans referred to Operation Shingle II as a Salerno landing or operation similar to Salerno, the terrain of the Anzio beachhead differed from Salerno. Instead of a relatively confined beachhead flanked by high ground, the men of VI Corps saw flat coastal plains with small patches of woods and tree lines along a good road network leading east to the Colli Laziali or Alban Hills, located approximately 20 miles from the shoreline (See figure 5-1). Instead of discussing key terrain, the VI Corps OPLAN listed critical terrain which

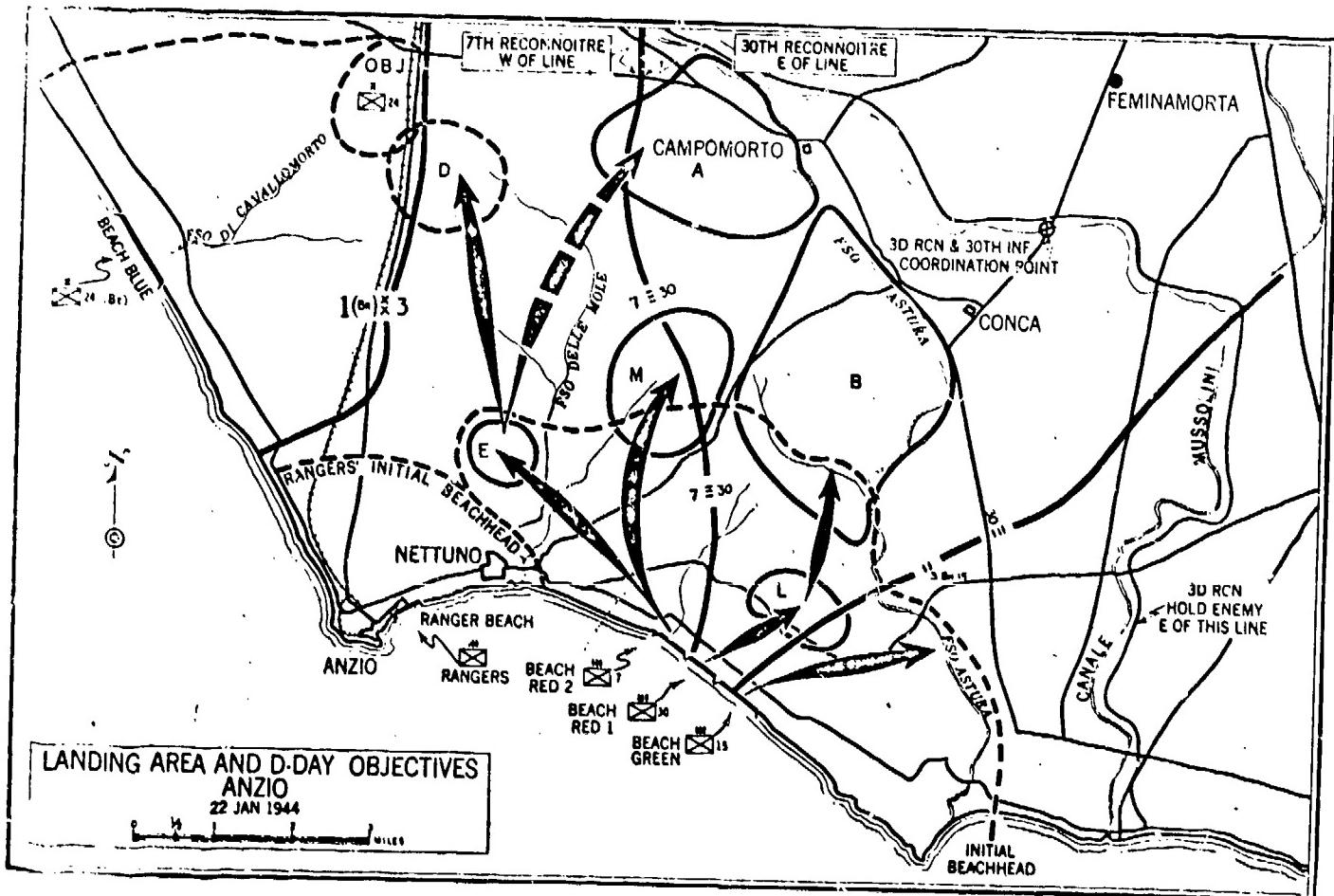


Figure 5-2

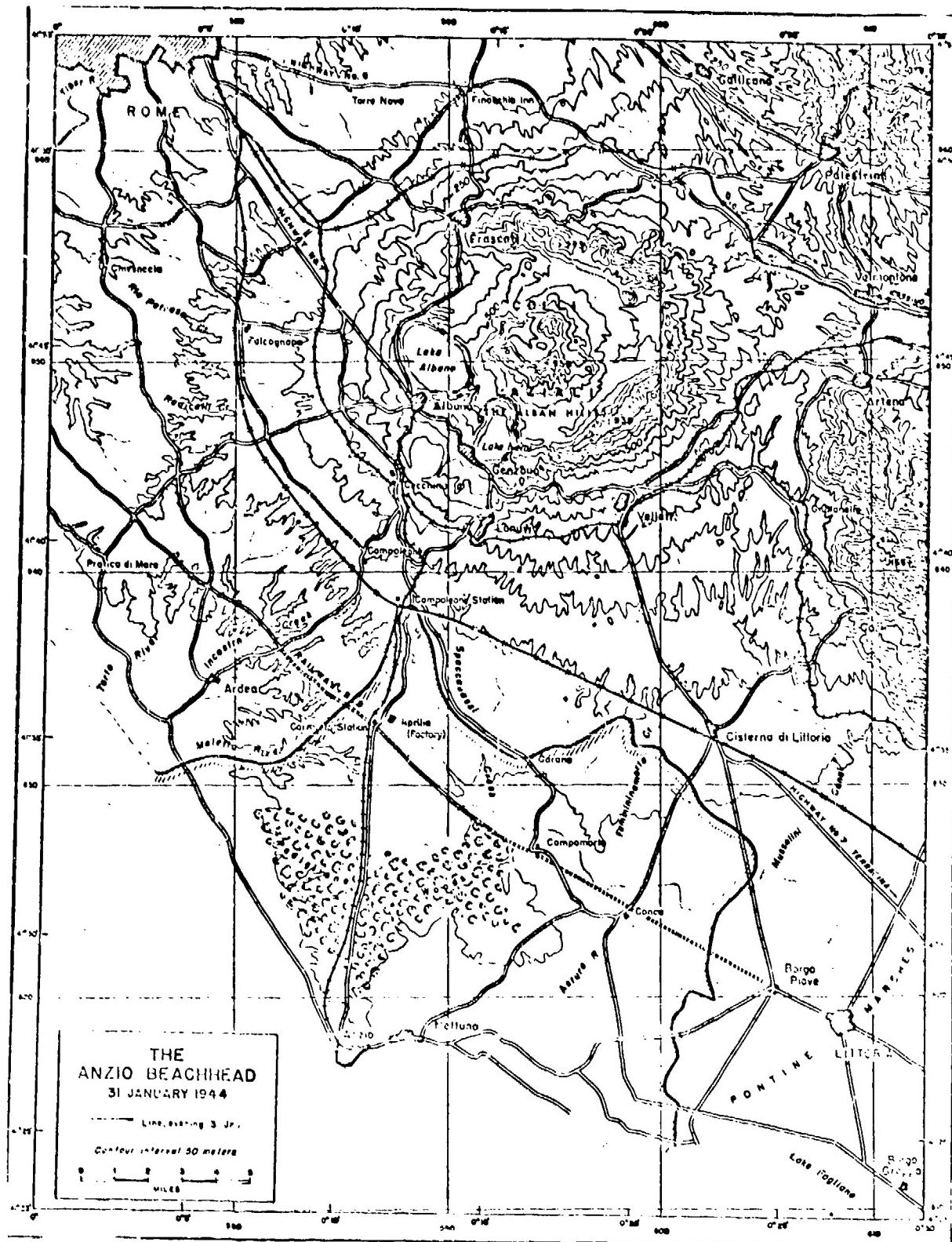


Figure 5-3

was no doubt synonymous in the tactical study of terrain. The critical terrain included: the port of Anzio, the coastal plain extending north-east toward the Tiber River, Campoleone as well as Cisterna, and the Alban Hills.<sup>278</sup> Interestingly, these identified critical terrain features did not appear in the VI Corps OPLAN initial or subsequent objectives (See figure 5-2). But they were obviously key areas (See figure 5-3) if the Germans lines of communication were to be interdicted.

Located 15 miles south of Rome, the Alban Hills sat astride Highway No. 7 and Highway No. 6 which were the vital German supply routes. Blocking these routes could threaten to isolate all German forces to the south along the Gustav Line. Therefore, the Germans recognized that the seizure of this 3,100 foot mountain would place "the overall strategy of the Germans' conduct of the war in Italy in jeopardy."<sup>279</sup>

General Lucas had two basic options to consider - exploit the tactical surprise by occupying the Alban Hills or consolidate the beach-head to await the inevitable German counterattack. In the first course of action, General Lucas was probably influenced by his experience at Salerno where the rapid movement and reaction of German forces impressed all Allied commanders and nearly defeated the landing force. General Lucas was not privy to Ultra information and therefore did not know, initially, that only two German maneuver battalions were in the immediate area. Lacking that intelligence, to push his two-division size force inland twenty miles appeared to him too risky.<sup>280</sup> After all, General Clark had told General Lucas to be careful, remember Salerno, and not stretch his neck out too far.

In the second course of action which General Lucas adopted, there were three more limited options: (1) consolidate a small

beachhead; (2) expand the beachhead to encompass the critical towns of Campoleone and Cisterna (both roads and railroad intersections); or, (3) deploy a regimental combat team to the Alban Hills to occupy, screen, or disrupt German forces approaching the beachhead area. General Lucas selected the first limited option and consolidated the small but gradually enlarging beachhead. As discussed earlier, General Clark's guidance to Lucas was to secure a beachhead first and advance on the Alban Hills if "conditions warranted."<sup>281</sup>

The failure to exploit tactical surprise and move to the Alban Hills has remained a controversial decision. Some writers contend that General Lucas "played it too safe" and threw away a tremendous opportunity to hurt the Germans.<sup>282</sup> Winston Churchill condemned General Lucas for failing to not only take the Alban Hills but also take Rome immediately. Even General Kesselring remarked in his memoirs that General Lucas had in fact passed up a great opportunity to cut German lines of communication and thereby place German forces along the Gustav Line in jeopardy.<sup>283</sup> How did the Allied generals feel about General Lucas' decision?

General Clark offered the most interesting evaluation of this subordinate. In his published account of Anzio, General Clark stated.

I have been disappointed by the lack of aggressiveness on the part of VI Corps, although it would have been wrong in my opinion to attack to capture our final objective (Alban Hills) on this front. But reconnaissance in force with tanks should have been more aggressive to capture Cisterna and Campoleone.<sup>284</sup>

In other words, General Clark agreed that General Lucas was correct to consolidate the beachhead but General Clark chose limited option number two - seize the key towns of Cisterna and Campoleone. In later years,

General Clark offered a more detailed opinion during his oral history interview. He remarked:

When he (General Lucas) landed, he established himself ashore securely on that little beachhead as far as he could. You can't go way out 'cause you'd get cut off. You just can't spread it that thin with no reserves, you see. So, he did right. I was up there, frequently and I checked him. We began immediately to get the intercepts, you see, as to what counteractions the Germans were taking and to have ordered Lucas to go with his two divisions and to start forward march was assinine.<sup>285</sup>

The intercepts that General Clark referred to were Ultra messages.

General Alexander also supported General Lucas' decision. In his memoirs, General Alexander stated that General Lucas, in hindsight, was right to consolidate before striking out. He remarked further that concerning the German enemy:

. . . he is quicker than we are - quicker at regrouping his forces, quicker at thinning out on a defensive front to provide troops to close gaps at decisive points, quicker in effecting reliefs, quicker at mounting attacks and counterattacks, and above all quicker at reaching decisions on the battlefield. By comparison our methods are often slow and cumbersome, and this applies to all our troops, both British and American.<sup>286</sup>

General Alexander added that "Fifth Army's two main efforts at Anzio and Cassino were incapable of mutual support and neither was powerful enough to do the job (capture Rome) alone."<sup>287</sup> Therefore, he explained that General Kesselring's contention that the Allies "missed a uniquely favorable chance of capturing Rome" was unrealistic.<sup>288</sup> The Allies simply did not have sufficient forces to secure a beachhead, move to capture the Alban Hills, then seize Rome and simultaneously protect the lines of communication required to sustain the consolidation of these objectives. But, one must remember that initially General Alexander was optimistic that an Anzio-like amphibious landing would convince General Kesselring to withdraw his outflanked forces from the Gustav Line to

positions north of Rome.<sup>289</sup> General Kesselring did not choose that course of action. If General Alexander recognized the unattainability of the objective (Alban Hills), the question remains why did he or General Clark not issue a fragmentary order to modify the original operations order? In this particular instance, it could have been delivered orally when General Alexander visited General Lucas on D-day. It would have been most appropriate because it would have clarified General Lucas' mission according to the German 10th Army's continued persistence at the Gustav Line (despite the landing). In addition, General Lucas could have been updated on the German reaction to the landing without attributing the source as being Ultra.

General Eisenhower, of course, had not favored Operation Shingle II in the first place. But he also endorsed General Lucas' actions. General Eisenhower stated:

The situation was almost a model for the classical picture for initiating a battle of destruction. . . . The Nettuno landing was really not much heavier in scale than an airborne landing would have been during those critical days when time was all-important. The force was immobile and could not carry out the promise that was implicit in the situation then existing. . . . there will be no great destruction of German divisions as a result thereof.<sup>290</sup>

Of course, one must remember that despite General Eisenhower's opinions of the feasibility of Operation Shingle II, Winston Churchill was convinced that this amphibious landing was practical as well as appropriate. In any event, the four Allied generals, to include General George C. Marshall, the United States Army Chief of Staff, most knowledgeable of the enemy situation essentially endorsed the decision made by General Lucas not to move to the Alban Hills, at least immediately or until the beachhead was fully secured.<sup>291</sup> How did the enemy commander, General Kesselring, react to the Allied landing?

The Allied amphibious landing at Anzio brought German 10th Army military planning directed at the Gustav Line to a standstill. For example, Ultra revealed that the 1st Parachute Corps had received on 21 January the 94th Infantry 29th Panzer Grenadier, and 90th Panzer Grenadier Divisions.<sup>292</sup> As one of his first measures, General Kesselring decided to return the 1st Parachute Corps to the Rome area. But, he had committed elements of the three divisions now subordinate to the 1st Parachute Corps. Therefore, he reassigned all three divisions to the XIV Panzer Corps on 21 January, releasing command responsibility from the 1st Parachute Corps.<sup>293</sup> This now permitted the 1st Parachute Corps (headquarters element) to become the command and control element for German units sent to the Anzio area, first to contain and then to counterattack the Allied landing.

General Alexander knew that General Kesselring intended to defend the Gustav Line, even though the Allies landed at Anzio. Alexander as well as General Clark no doubt discovered this disturbing news when Ultra provided a message from General Kesselring to the German High Command which stated:

Allies have landed south of Tiber with about three divisions in order to make a thrust into the rear of 10th Army and to capture Rome. Further landings on the west and northern coast of Italy are possible. On 24th, intention - defend maintaining contact with Gulf of Gaeta. If superior pressure, left side can withdraw to the Foro position which is to be held. 14th Army will take over command on coastal front between Cecina - Terracina. Its mission is to throw back into the sea by counterattack<sup>294</sup> Allies who have landed south of Rome. GHQ remains in San Oreste.

The Foro position was just behind the Gustav Line. But the real significance in this intercept was the mention of 14th Army, then located in northern Italy. Now, the 14th Army Headquarters element, at least, was en route to the Anzio area. This indicated General Kesselring's intent

to oppose VI Corps with forces large enough to require an army-level headquarters.

There were German contingency plans for an Allied landing on the west coast of Italy. "Case Richard" related to General Kesselring's 10th Army area of operations. But, "Case Richard" was only a part of the overall German contingency plan. According to these plans previously identified German units would move to destroy any Allied beachhead from northern Italy, southern Germany, and other areas to central or southern Italy, if needed. For example, in addition to 14th Army headquarters moving from northern Italy to the Rome area, contingency plans called for the 76th Panzer Corps staff in the Adriatic to move to central Italy and be subordinated to 14th Army.<sup>295</sup> Before discussing the German units that moved from the north to the Anzio area, General Kesselring's shifting of forces in the 10th German Army area should be explained.

General Kesselring was quick to implement Case Richard. This plan involved (1) local forces in the vicinity of Rome containing the Allied assault forces, (2) uncommitted units preparing for insertion at the Gustav Line being diverted to Anzio, and (3) battalion and regimental size units being pulled out of the Gustav Line from areas where contact was minimal for dispatch to Anzio. Ultra revealed implementation of nearly all these initiatives. Communications with the two battalions in the Rome area did not appear through Ultra, probably because they used existing telephone systems. But still the Y service probably intercepted some low level wireless radio messages. Nevertheless, no record of such communications, however, could be located.

Ultra disclosed that the 3d Panzer Grenadier Division was the 10th German Army reserve on 21 January and would no doubt be sent to Anzio.<sup>296</sup> On 23 January, the 3d Panzer Grenadier Division and lead elements of the 71st Division (this unit was being transferred from Istria to the Gustav Line when orders were changed) arrived at the Anzio beach-head area.<sup>297</sup> Tracking these units with Ultra messages was sometimes difficult. For example, the 3d Panzer Grenadier Division and lead elements of the 71st Division were not identified en route to Anzio. But once they arrived, other intelligence sources, principally Y service, identified them and then Ultra intercept operators scanned the airways to confirm if the entire division was present or if only lead elements were at Anzio while the rest of the unit was en route. In this instance, the 3d Panzer Grenadier Division had arrived and the bulk of the 71st Infantry Division was still moving toward Anzio. Despite the claims of some historians, it should also be understood that Ultra was not real time reporting. For example, the report of the 3d Panzer Grenadier Division being the 10th Army reserve was intercepted on 21 January but not deciphered and disseminated to Fifth Army until 0533 hours on 23 January. Naturally some Ultra information arrived sooner and others later. Consequently, it was sometimes difficult to react to some Ultra messages while others were less perishable. The important point remains that General Kesselring's intentions to defend, not withdraw from the Gustav Line, as well as to reinforce Anzio with large numbers of forces became readily apparent to the Allies.

Among the German units pulled out of the Gustav Line, Ultra revealed that elements of the 15 Panzer Grenadier Division, Herman Goering Division, and 1st Parachute Division had been ordered to move to

the beachhead.<sup>298</sup> Then, on 25 January, Ultra indicated that General Kesselring ordered the 26th Panzer Division to Avezzano for refitting and eventual deployment to the beachhead.<sup>299</sup> The 305th Infantry Division was ordered to relieve the 26th Panzer Division in its assigned sector along the Gustav Line.<sup>300</sup> Ultra intercept collectors were virtually flooded with orders going to various German units. As German Major General Wolf Hauser commented after World War II, ". . . a jumble of multifarious troops streamed in from all directions. As a general rule, it is undesirable and unprofitable to break up established formations . . . but in this case it was unavoidable."<sup>301</sup>

As for the German units dispatched in accordance with other contingency plans in the north, the German High Command sent the following:

- (a) 65th Division (less one regiment) from Genoa;
- (b) 362d Division (less one regiment) from Rimini;
- (c) two reinforced battalions of the 16th SS Panzer Grenadier Division from Leghorn;
- (d) 715th Infantry Division from southern Germany; and,
- (e) 114th Rifle Division.

In addition, the 1027th and 1028th Panzer Grenadier Regiments, the Lehr Regiment (infantry), the Lehr Regiment (artillery) and one heavy tank battalion were dispatched from the German reserve in southern Germany. Finally, the 1026th Grenadier Regiment was to form the basis for the newly formed 92d Infantry Division in Viterbo.<sup>302</sup>

As these units arrived at the Anzio beachhead, it seemed that General Lucas or his staff tended to assume that the entire German divisional formations were arriving intact. This led VI Corps to overestimate the strength of the German opposition. For example, General Lucas'

diary shows the entire 65th Division arriving on 28 January.<sup>303</sup> In actuality, the 65th arrived in an assembly area less one regiment which never was sent from northern Italy.<sup>304</sup> Ultra portrayed an accurate picture of the units, down to regimental and quite often battalion level, within the respective divisions approaching the Alban Hills. But this information was unavailable to General Lucas. Ultra revealed all of the German units moving from the north, except the 362d Division and the 16th SS Panzer Grenadier Division. The 361d Division deployed north of Rome anyway after its arrival at the coastline of Italy.<sup>305</sup> This disposition may account for its absence in communications, because the division would not see any action, instead being held in reserve ready for additional landings which General Kesselring believed were imminent north of Rome in the Civitavecchia area. As for the 16th SS Panzer Grenadier Division, little is known about their deployment. The movement of these SS units was characteristic of the excellent signals security of all movement. SS units were very difficult to track because they used signals sparingly and then over low frequencies. Thus, very few communications were intercepted that related directly to SS units.

After the initial three days of Operation Shingle II, it was evident to the German Southwestern Command that the Allies did not intend to move out immediately from the beachhead area. Consequently, the period 22 January to 28 January became a race between the Germans and the Allies to determine who would be the first to build forces large enough to initiate an offensive, figure 5-4. This did not rule out local probes and minor limited attacks. On 24 January, General Lucas sent the British 24th Guards Brigade to Aprilia (referred to as the "Factory") (See figure 5-3) only to find elements of the 3d Panzer Grenadier Division already there in formidable strength.<sup>306</sup> General Lucas' G-2

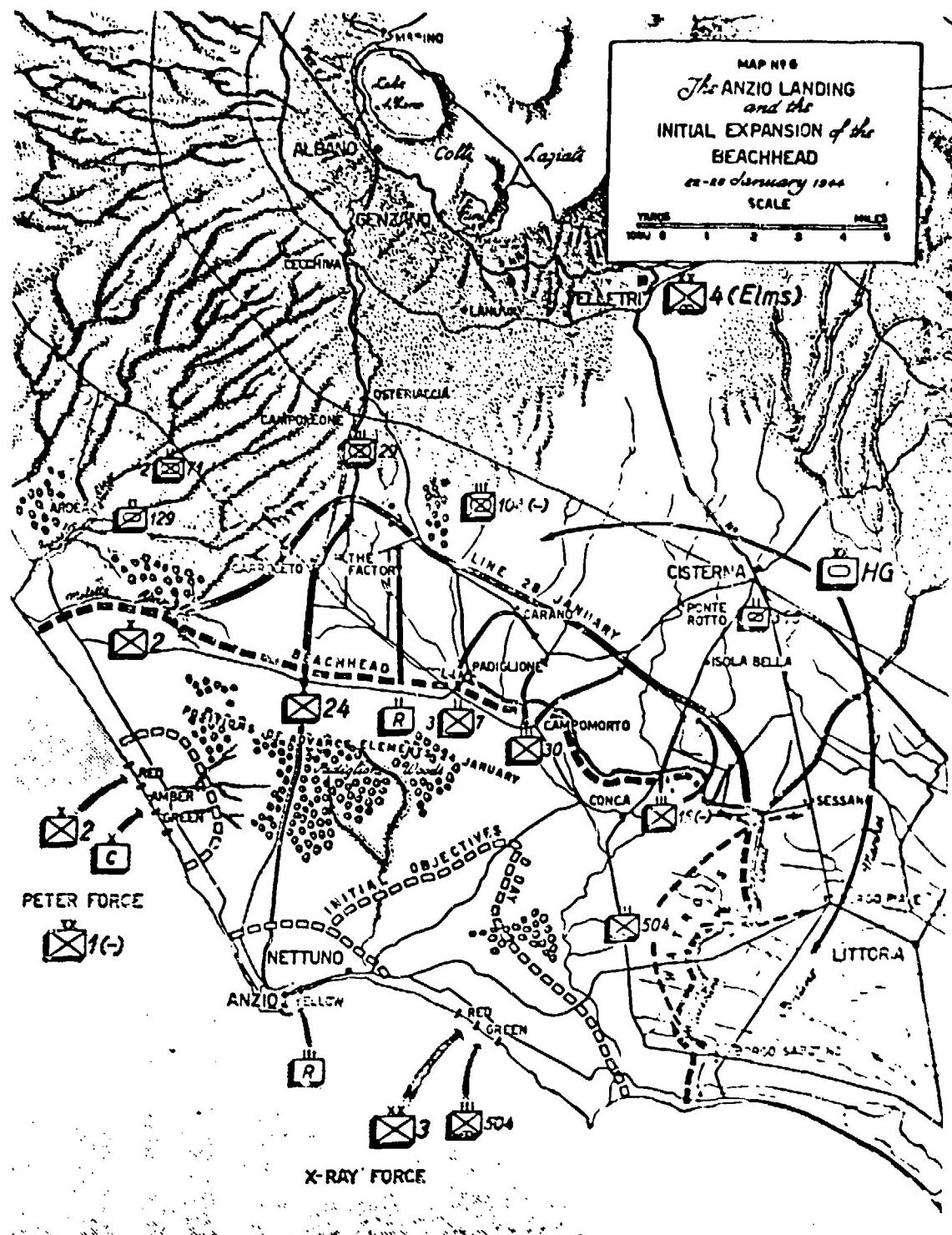


Figure 5-4

estimated that approximately 40,000 German troops had arrived by D+2 and that more Allied troops would be needed for a successful offensive.<sup>307</sup> General Lucas and his G-2 still did not realize that they were facing understrengthed German divisions. As each new German division or unit was identified by prisoner of war reports, Y-service or other routine intelligence sources, VI Corps appears to have assumed that the entire German division was present or near by en route. Therefore, VI Corps estimates of the opposition were often exaggerated. General Clark and General Alexander, on the other hand, had a more realistic estimate of the opposition available through Ultra messages. They could not and did not communicate their knowledge to the corps commander. General Lucas consequently decided to "dig-in" with a beachhead that ran approximately 26 miles along the shoreline. The half-moon shaped perimeter extended approximately eight miles deep at the top of the arc. German artillery observers in the Alban Hills possessed an unobstructed, spectacular view of the beachhead and directed artillery fire to all parts of the congested beachhead area.

One of the most controversial aspects of Operation Shingle II was United States Army Air Force support for the operation. General Eisenhower planned to isolate the area of operations by employing strategic bombings in areas that would divert and slow the German units that he believed would inevitably be sent toward the Anzio beachhead. British and American army and air force planners in London thought the best way to accomplish that mission was to attack marshalling yards, rail centers, and large repair facilities.<sup>308</sup> Intelligence analysts and air force planners in the Mediterranean commands disagreed and wanted rail bridges, road bridges, and viaducts destroyed.<sup>309</sup> It was

finally agreed that bridges and the railway system would be targetted. Regardless, General Clark did not have much faith in strategic bombings or air interdiction planning. The Army Air Force disagreement over target hardly convinced Clark that airpower would help his command. In fact the air campaign enjoyed a mixed measure of success. Its relationship to Ultra is very important.

Although it is impossible to qualify the success of Allied strategic bombings, Ultra reported that air interdiction was achieving at least some of the desired results. For example, an intercept of a German message on 23 January indicated:

Air situation in whole (10th) army area (has) very lively Allied air activity, numerous fighter-bomber attacks on main battlefield, roads and localities caused several <sup>310</sup> roads to be blocked and led to loss of many M/T (motor transports).

On 29 January, another intercept revealed that the ports of Benedetto and Ancona, on the eastern side of Italy, had been bombed and German transports were either unable to unload their cargoes or were limited to a few remaining berths.<sup>311</sup> In addition, roads and railway installations to the south were listed as destroyed.<sup>312</sup> This was important to the Allies at Anzio because resupply of German units arrived by sea on the east coast of Italy and was shipped west across to Anzio. The ports on the west coast, such as Leghorn and Piombino, were also important German naval discharge points. However, the more supplies that were shipped to these western coastal ports meant the more congestion on the road and railway networks leading south toward Anzio that could otherwise be used primarily for moving units. Still, it is difficult to determine the precise number of ships that were delayed or prevented from discharging cargo. It was also difficult to state with certainty how

long a particular route remained blocked or a destroyed bridge delayed unit and supply movement. Nevertheless, Ultra verified that air interdiction efforts were definitely hurting the German resupply system.

On 26 January, for instance, the 14th German Army reported that:

. . . No supply trains as yet coming up into Rome area. Supply arrivals from bulk transport space insufficient to cover the increased daily requirements. Stocks continuing to sink. In present circumstances impossible to create reserves for the intended countermeasures in 14th Army sector. Intended to give supply trains priority over troop transport trains.<sup>313</sup>

The 14th German Army sector was Anzio. The Allies could readily surmise from this Ultra intercept that air interdiction was influencing German opposition at Anzio, so much so that supply was given priority over troop movement to Anzio. German officers who had worked on General Kesselring's staff commented after the war that:

It also occurred that after the repair of a disrupted line a great number of supply trains arrived simultaneously at the southern unloading stations. The Armies were on such occasions not in a position to get hold of a sufficient number of workmen and trucks to negotiate the contents of these trains. A clogging of stations endangered from the air, by trains and goods was thus unavoidable. It also happened in the case of such mass arrivals that an Army was flooded by material it did not need at the moment, while another Army required it most urgently.<sup>314</sup>

Ultra sometimes revealed the exact type of after-action report that the Allies desired. For example, an intercept on 28 January stated:

Fighter bomber attacks at 1250 hours on road bridges just north of Popoli. Repairs will take about ten days. At 1430 hours (on) twenty-seventh, center of Popoli and pass road from Popoli to Aquila attacked by 24 bombers. Road passable to limited extent for all classes.<sup>315</sup>

Such information indicated what targets had been adequately hit and which ones should be struck again if roads still remained passable. Of course, this Ultra information was not always available every time air

interdiction sorties were flown, nor could all airstrikes be correlated to Ultra. However, many similar Ultra messages from January to May 1944 show how important these intercepts were to Allied targetting efforts and how successful Allied strategic bombings significantly hurt German operations in southern and central.

Although German resupply efforts were attacked with some success, Ultra does not show where Allied strategic bombings delayed troop or unit movements from the north to the Anzio beachhead. G. A. Shepperd explained, in his book The Italian Campaign, 1943-45, that flying conditions had been bad between 24 January and 4 February. Thus, the Allies were "seriously hampered flying on nine of twelve days."<sup>316</sup> Furthermore, German units moved during hours of darkness and, if bridges were destroyed, an alternate route was planned, though it might be a little longer and over a secondary road.<sup>317</sup> In addition, on some occasions, portable or make-shift bridges were constructed as convoys attempted to maintain forward movement. In sum General Clark was justified in his pessimism over the outcome of the air interdiction effort; however, he should have recognized from Ultra that strategic bombings had at least accomplished one secondary objective - crippling the German resupply operations.<sup>318</sup>

On 29 January, General Lucas intended to attack to seize the Alban Hills. This decision was a result of pressure applied by Prime Minister Churchill on General Alexander who in turn ordered General Clark to have General Lucas execute an operation that would secure the Alban Hills.<sup>319</sup> By 26 January it was no doubt evident to General Alexander and General Clark that the beachhead was becoming constricted and had to be expanded. Ultra disclosed that the Germans were

experiencing resupply problems. In addition, the United States 45th Infantry and 1st Armored divisions would soon arrive at Anzio from Naples. Furthermore, though General Alexander understood General Lucas' decision not to advance on the Alban Hills immediately, but rather to secure a beachhead, he still believed that General Lucas had not been aggressive enough.<sup>320</sup> He particularly did not understand Lucas's failure to attack and seize the critical towns of Cisterna and Campoleone which were approximately half way to the Alban Hills.<sup>321</sup> But General Lucas was very cautious and wanted to await the arrival of the 45th Infantry Division and 1st Armored Division before extending himself.<sup>322</sup> Fortunately, the unloading of supplies resolved itself more easily as ships docked at the port of Anzio from North Africa and sustained this four division size force.

The attack by VI Corps to seize the Alban Hills failed. Too many things simply went wrong. The 1st Armored Division, commanded by Major General Ernest B. Harmon (a native Vermonter), did not complete its movement to Anzio until 29 January for reasons still obscure.<sup>323</sup> Therefore the attack was delayed one day. It is difficult to determine the effect that an additional day had on the Germans. General Kesselring had approved a counterattack plan for 28 January but it had been delayed because of aforementioned resupply problems. Furthermore, Ultra revealed on 28 January to the Allies that the 26th Panzer Grenadier Division was moving from its assembly area in Avezzano to the Anzio area.<sup>324</sup> So the extra day probably allowed the 26th Panzer Grenadier Division time to deploy and permitted more time for resupply efforts, as minimum as they were.

Once the attack by VI Corps was underway, more problems developed. Colonel William O. Darby's 3d Ranger Regiment was supposed to infiltrate two battalions into Cisterna to capture the town by seizing houses as strongpoints and disrupting the German defense. However, by 30 January, the 26th Panzer Grenadier Division and elements of the Herman Goering Division had filled the existing gaps that Darby's rangers intended to infiltrate through.<sup>325</sup> Two ranger battalions were caught in a German cross fire. Twelve hours into the attack, only six of the 767 commandos returned alive.<sup>326</sup> The remainder of the two battalions were killed or captured. Meanwhile, Major General Harmon's 1st Armored Division units were stopped by muddy terrain and undetected minefields.<sup>327</sup> This delayed armor support to the British 1st Infantry Division and 3d United States Infantry Division. Finally, weather conditions varied significantly each day and made forecasting virtually impossible during the winter months. As a result, General Lucas could not rely on close air support and, as it turned out, did not receive any during the initial few days of the Allied attack, because the weather was so bad. By 1 February, VI Corps attacking units were exhausted and had suffered 5,500 casualties in three days of fighting.<sup>328</sup> General Clark, worried about a German counterattack, ordered VI Corps to halt the attack. General Alexander apparently was unaware at the time that General Clark issued this order. Clark mentions in his book, Calculated Risk, that General Alexander "indicated that he did not agree with my order to Lucas on the previous day rescinding the instructions for the VI Corps to continue the attack on Cisterna."<sup>329</sup>

Interestingly, on 30 January, General Alexander visited VI Corps. On 30 January, after General Alexander departed 15th Army Group

Headquarters, an Ultra message revealed the first portion of a communication from Hitler. This intercept essentially stated that the battle for Rome would "flare up in the next three days, deciding the defense of central Italy and fate of the 10th Army."<sup>330</sup> It continued that the Allies intended to use the Italian campaign to tie down German forces that might otherwise be used to defend against the cross-Channel invasion. This was a remarkable insight and, though possibly good guess-work, it was probably an indication of good German intelligence collection. Hitler's comments also seemed to indicate pre-awareness of General Lucas' 30 January offensive and, no doubt, explains the 26th Panzer Grenadier Division sudden movement to Anzio (arriving on 29 January). If General Alexander had been aware of this message before or after he arrived at VI Corps is unknown, but it is doubtful. It is also difficult to determine General Clark's knowledge and reaction to this message; however, he definitely was very concerned about an enemy counterattack on 31 January. An exact cause and effect relationship cannot be verified, as is the case with most Ultra intelligence declassified to date.

Then, a series of important Ultra messages arrived at 15th Army Group, as well as Fifth Army Headquarters. The first intercept arrived on 1 February and quoted Hitler saying:

Tactically important and clear orders not sufficient, every officer and man of the army, air force, and navy must be imbued with fanatical determination to emerge victorious from the fight and to continue it <sup>331</sup> unflaggingly until last enemy destroyed or driven back into sea.

Although this message has received considerable notoriety by certain historians, at least in part, the substance of the message has never been properly attributed to Ultra. Undoubtedly it was designed to inspire

the German 14th Army, commanded by German General E. von Mackensen, to counterattack VI Corps.

It is important to understand General Alexander's intentions before he became aware of Hitler's instructions to drive the Allies into the sea as well as the influence of other Ultra messages during this time frame. Alexander, dissatisfied with Clark's order to VI Corps to halt the attack, recognized that the offensive had to continue because the beachhead was too small to accommodate Allied reinforcements. Furthermore, German artillery had been very effectively directed upon the crowded troops and supplies crammed within the small beachhead. In addition, the Allies had suffered so many casualties already in efforts to seize Cisterna and Campoleone that General Alexander may also have had emotional reasons for wanting to continue the attack. Nevertheless, on 2 February, General Alexander left General Lucas' VI Corps Headquarters to visit the 3d Infantry Division Command Post.<sup>332</sup> Alexander was anxious to get a better look at Cisterra. After his front-line reconnaissance, he then left determined to try again to seize Cisterna. Alexander ordered General Clark to have VI Corps attack again.<sup>333</sup> Clark reluctantly notified General Lucas that the VI Corps would attack again on 4 February.<sup>334</sup>

On 3 February, however, an important Ultra intercept arrived at Fifth Army that revealed General Kesselring's counterattack plan scheduled for 28 January.<sup>335</sup> Allied air interdiction of German resupply efforts had successfully postponed "countermeasures" by General Kesselring. But, now on 3 February, an actual German counterattack plan had been revealed by Ultra. General Clark had to wonder when would the Germans

counterattack? The German plan described a very threatening situation, especially now as VI Corps had taken so many casualties.

Ultra revealed the plans (Appendix G) as based upon two assumptions. First, it depended upon the arrival of the following German units:

715th Infantry Division  
1027 Panzer Grenadier Regiment  
1028 Panzer Grenadier Regiment  
Artillery Battalion of the Lehr Regiment  
I Battalion of the 4th Panzer Regiment  
Elements of the 114 Jaeger Division

The movement of these units was specified in the intercept to be completed approximately 31 January. The second assumption was that the supply of ammunition would improve.

Ultra further identified the battle groups and their assigned forces for the counterattack. These groups were:

65th Infantry Division (less 146 Grenadier Regiment)  
4th Parachute Division (less unidentified elements)  
3d Panzer Grenadier Division (less 8th Panzer Grenadier Regiment)  
104th Panzer Grenadier Regiment (less 3d Battalion)  
715th Infantry Division  
Herman Goering Panzer Division

The assigned objectives of these units were also detailed; however, German map grid references were used and therefore difficult to pinpoint exactly. But the objective of the German counterattack was clear - drive the Allies into the sea. Taken together with Hitler's order of the day, Ultra showed a potential Allied disaster in the making.

An additional interesting aspect of this Ultra message was the German attention devoted to naval gunfire. The Germans would attempt to eliminate the effect of Allied medium and heavy naval gunfire by directing heavy artillery flat trajectory fire and indirect artillery fires from railway cars. For this purpose, they found a special artillery

group designed for attacks on Allied ships. As early as D-day, long range 88mm and 170mm German batteries shelled Allied ships off shore and interfered with landing craft resupplying the beachhead.<sup>336</sup> Allied ships moved further out to sea beyond the German artillery range. If the German counterattack plan succeeded and the railroad leading from Campoleone to Anzio remained intact, this railway mounted German artillery could once again threaten Allied naval gunfire support, landing craft operations, and hospital ships. The locations of the Allied naval vessels could not be determined from historical accounts of Operation Shingle. Nevertheless, Ultra revealed an innovative German idea that the Allies would have to counter if a German offensive pushed toward the port of Anzio-Nettuno.

Imagine the impact that these Ultra messages had on General Clark. He had just reluctantly ordered, pursuant to General Alexander's command, General Lucas to attack again to seize Cisterna. Already a cloud of distrust or tension existed between General Alexander and General Clark as between Generals Lucas and Penney. General Lucas and General Penney's ill feeling toward each other had its roots before the first Allied troops stepping ashore. In addition, General Penney's 1st Division succeeded during the VI Corps attack on 30 January by nearly taking Campoleone.<sup>337</sup> The British casualties had been high (1,400) and their penetration developed into an exposed salient that General Lucas considered to be very dangerous.<sup>338</sup> The possibility of a German counterattack cutting off the 1st British Division salient was apparent; therefore, General Lucas ordered General Penney to withdraw.

After taking so many casualties and nearly succeeding in taking his portion of the Alban Hills, General Penney did not want to

withdraw.<sup>339</sup> Instead, he felt that reinforcements should be committed to exploit the British success. However, General Lucas was not about to commit General Harmon's 1st Armored Division because that would have depleted the VI Corps reserve.<sup>340</sup> Again, Lucas was cautious. General Clark had been critical of Lucas' lack of aggressiveness. Then; after criticizing Lucas' use of General Harmon's armored units and Colonel Darby's rangers, Clark felt it was foolish to "waste our strength" and ordered the halt to the attack.<sup>341</sup> But, another change in direction occurred as General Alexander wanted VI Corps to resume the attack. Now, with Ultra disclosing imminent German plans to counterattack, there would be another change in instructions to VI Corps. Although these changes seemed perhaps symptomatic of indecision, Clark could not tell General Lucas that Ultra revealed German counterattack planning and the movement of large German forces toward Anzio. And so, General Clark decided to rescind the new attack order. General Lucas described the situation in his diary as,

I got this message shortly after midnight. A plan had been devised before Clark's departure (3 February) by which 3d Division was to launch another attack against Cisterna and the British were to push forward and open a way for armor. This was countermaned. I never knew exactly what happened but apparently the Army Commander had received conclusive information as to German strength and intentions and from such a source that it could not be ignored. German combat strength on this date reached 98,000 and was still increasing.<sup>342</sup>

The actual message to General Lucas read:

Instructions issued to you to advance your left to capture Cisterna are hereby rescinded. You should now consolidate your beachhead and make suitable dispositions to meet an attack. You may withdraw 1st Division farther to south if you consider that action advisable. Advance on our objectives will be resumed later.<sup>343</sup>

General Lucas received this message at midnight on 3 February, just several hours before VI Corps was planning to attack, unknowingly into the

face of a large German counterattack force.<sup>344</sup> General Alexander did not object to the cancellation because he probably returned to his headquarters from VI Corps to find a copy of the same Ultra message detailing the German counterattack plans. Therefore, it seems that a near Allied disaster was narrowly avoided. General Lucas received the benefit of Ultra information, though he was not aware of the source. The question remains why he received sanitized Ultra information on 3 February while there was no effort to provide such intelligence information earlier. General Clark may have simply regarded the circumstances as a live or die situation in which he had to risk a compromise of Ultra. If the German 14th Army had counterattacked immediately after VI Corps attacked, the Germans would have driven the Allies into the sea. As it turned out, even with VI Corps in defensive positions when the German counterattack began, it was still difficult to contain the German advance.

Meanwhile, General Mackensen prepared to counterattack. He also had problems. General Kesselring had notified General Mackensen to be prepared to return some German forces to reinforce the Gustav Line.<sup>345</sup> Allied attacks were pressuring the German strongpoint at Cassino but there was still no penetration of the Gustav Line to permit an Allied push up the Liri Valley toward Rome. Ultra also disclosed that General Kesselring and Mackensen were concerned about another Allied amphibious landing, possible north of Rome at Civitavecchia.<sup>346</sup> Kesselring also wanted more submarines to attack Allied shipping near and en route to Anzio. However, Ultra reported that the German navy had only one more (a few had already been operational near the east coast of Italy) submarine available in the Mediterranean and it could not be operational

until 30 January.<sup>347</sup> Finally, stocks of ammunition had been reduced repelling the Allied attack at Anzio on 30 January making it necessary to await further resupply before resuming operations.<sup>348</sup>

General Mackensen ordered the 1st Parachute Corps to counterattack on 4 February, notwithstanding the many problems experienced by the German 14th Army during those initial days of February as disclosed by Ultra. The first phase of the German offensive drove the British 1st Division back toward Albano road that led to Anzio. In the second phase, Aprilia was captured. But, the third phase of the counterattack, to drive down the British and American divisional boundaries to the sea was never realized. Massed Allied air and artillery halted the German offensive.<sup>349</sup>

Aprilia, however, was the last critical terrain the Germans needed to facilitate another attack to destroy the beachhead. General Lucas recognized the significance of the loss of Aprilia and summoned his division commanders to discuss recapturing this town. After General Penny briefly described the enemy situation, General Lucas turned to Major General William W. Eagles, Commander, 45th Infantry Division, and said "O.K. Bill, you give 'em the works."<sup>350</sup> As awkward as that remark seemed, that was characteristic of the meeting. Lucas left his division commanders without discussing a plan, issuing guidance, specific orders, or providing even a concept of how the mission of recapturing Aprilia was to be accomplished.<sup>351</sup> Consequently, out of this vacuum, a regiment of the 45th Infantry Division was ordered to retake the town of Aprilia. The regimental commander passed this mission to a battalion commander, who delegated the task to two rifle companies supported by two tank companies.<sup>352</sup> There was never any artillery support

coordinated and the attack failed.<sup>353</sup> After this futile action, both sides were exhausted, weary, and disorganized. Operation Shingle II had bogged down and fresh commanders were needed to reinvigorate it.

The relief of General Lucas on 22 February should not be associated with Ultra. As General Alexander remarked in his memoirs, Lucas' relief as commander of the VI Corps was not based upon his failure to seize the Alban Hills immediately upon landing at Anzio. Like VI Corps troops, General Lucas had simply become physically and mentally drained during the course of the battle. Perhaps his lack of leadership performance in the ill-fated Aprilia counterattack demonstrated that combat fatigue. Lucas had the additional problem of not understanding the British. The 1st British Division leaders had no confidence in him and General Lucas, aware of British disenchantment with his leadership, did nothing to conciliate the situation. In fact, Lucas believed that the British would never be satisfied with his actions, whatever course he took. The classic example of Anglo-American friction, as a result of Penny's and Lucas' prejudice, at the corps and division level no doubt motivated General Alexander more than anything to pressure General Clark into relieving Lucas. General Clark commented "Penny . . . began to itch at poor ole Johnny Lucas . . ." and he (General Lucas) "knew they were going to get him and they did."<sup>354</sup> Evidently, General Clark had some resentment toward the British over the whole matter and did not really want to relieve Lucas. General Truscott became the new VI Corps commander and immediately concerned himself with new German counterattacks.

There were two major counterattacks, 16-20 February (figure 5-5) and 28 February to 3 March (figure 5-6). These offensives were not as

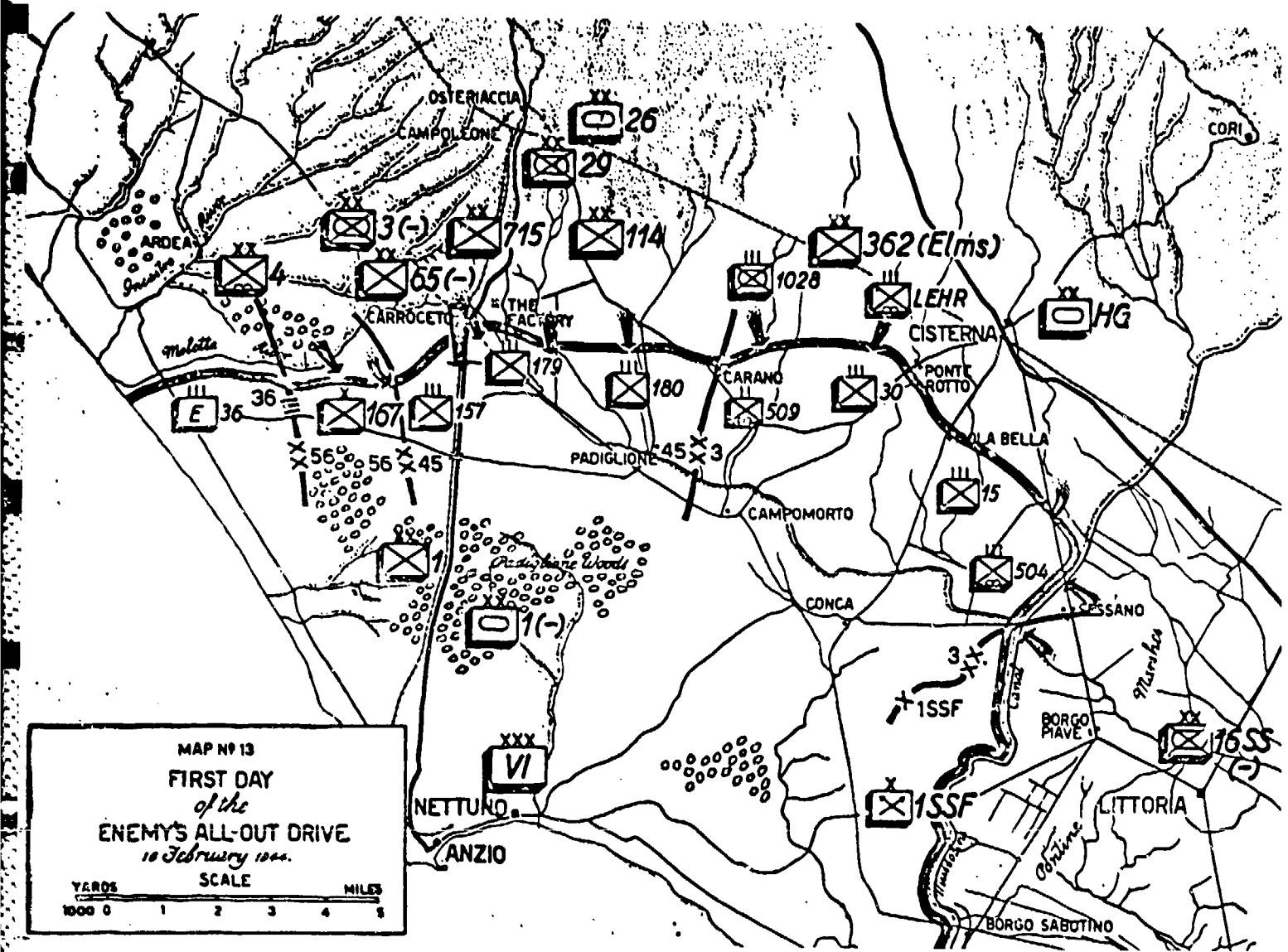


Figure 5-5

successful as the 4 February German counterattack and, by 3 March, the Germans reverted from making further counterattacks over to assuming a purely defensive posture.<sup>355</sup> Ultra continued to provide useful information concerning Hitler's intentions and dispositions right up to Operation Diadem on 11 May which led to the ultimate Allied breakout and seizure of Rome.<sup>356</sup>

This concluded the amphibious landing, security of the beachhead, and attempts by the German 14th Army to counterattack to destroy the beachhead. Ultra as well as other types of intelligence information had been critical to the survival of the VI Corps. There were many instances of Ultra providing the Allied leaders at Fifth Army level and above a clear picture of the problems experienced by the Germans, troop movements to the Anzio beachhead, and most importantly, German operational intentions. Receipt of Ultra messages did not always provide sufficient reaction time in a tactical sense, but in the case of the German 4 February counterattack, there was just enough time to avoid a likely annihilation of the entire VI Corps. Several military historians, as well as Hitler, looked upon Operation Shingle as merely a diversion to the Allied plan to invade France from across the English Channel. Actually, it was more than that, it was an attempt to seize Rome and knock the Germans out of southern and central Italy.

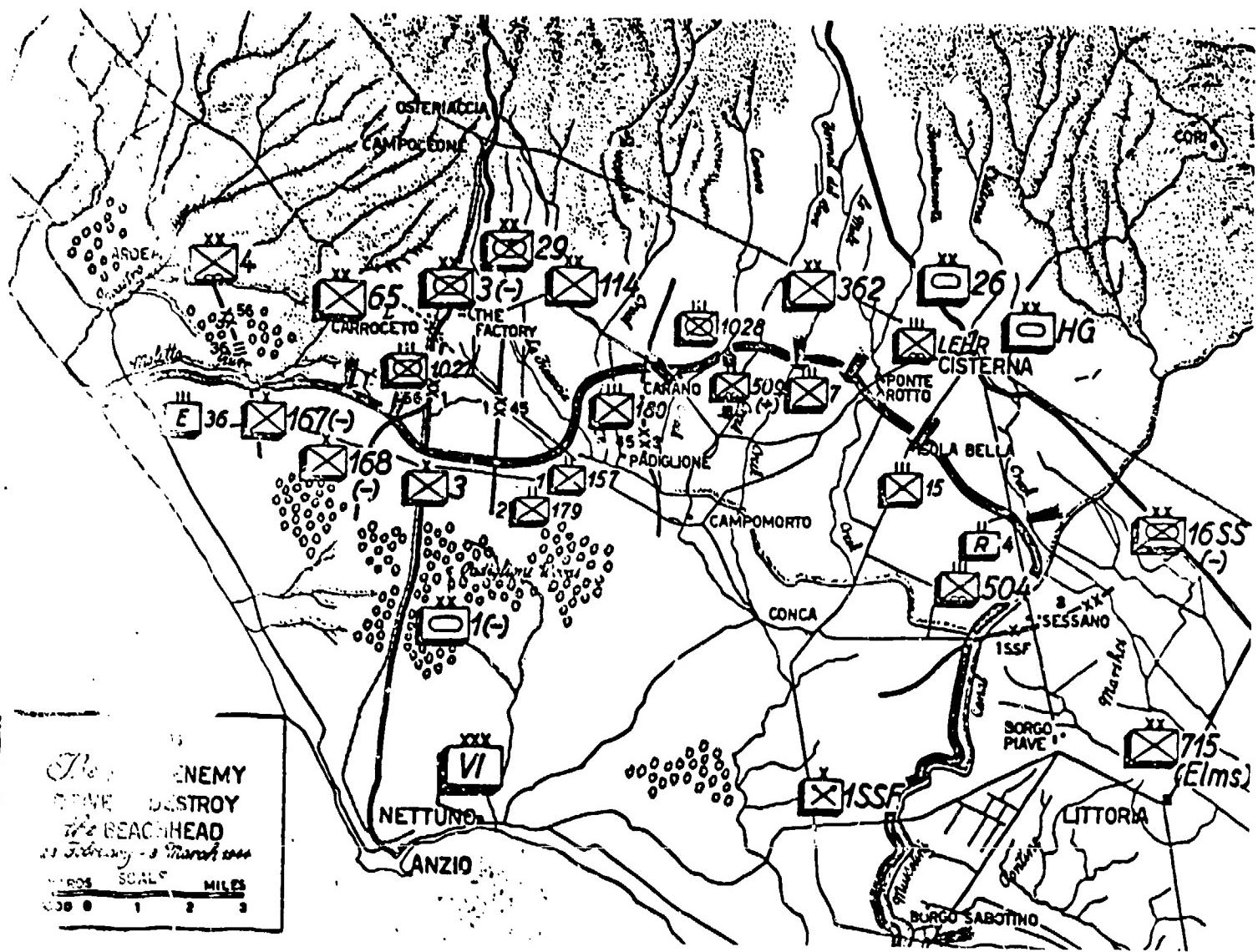


Figure 5-6

## CHAPTER 6: CONCLUSIONS

The Winterbotham-Clark controversy about the influence of Ultra on General Clark during the Italian Campaign of World War II inspired this thesis. Although there are still many constraints or limitations in the analysis of this important period of World War II, some important conclusions, previously unpublished, have been formulated. There are, however, serious gaps remaining in our knowledge of Ultra and Operation Shingle that must be acknowledged before misperceptions or falsehoods develop. Finally, one of the desired outcomes of this thesis is to encourage other interested students of military history, especially in regard to Ultra, to investigate further the impact of Ultra upon key battles of World War II. Therefore, a few recommendations for further research efforts will also be discussed.

The following conclusions have been derived:

1. There is a considerable amount of Ultra intelligence information, formerly classified, now available to scholars and academicians. This material does not alter recorded historical events related to Operation Shingle or Anzio; however, it does provide significant insight into the decision making by key Allied leaders.
2. General Clark received and benefitted from Ultra intelligence. He attested to usage in his oral biographical history interviews before ever being accused of not appreciating Ultra. He also benefitted from having a SLU assigned to the Fifth Army headquarters. The most obvious use of Ultra by General Clark was on 3 February when he

rescinded the VI Corps attack order and told General Lucas to "dig-in" and prepare for a German counterattack.

3. General Clark as well as General Alexander knew the exact German unit dispositions prior to the amphibious landing at Anzio. In addition, they were aware of contingency plans and actual large scale German unit movements toward the beachhead after VI Corps landed.

4. Previous Allied experiences weighed heavily upon developing the exploitable situation at Anzio. Unsuccessful Allied air interdiction efforts and the anticipated rapid reaction and movement of German forces to the Salerno beachhead adversely influenced General Clark at Anzio.

5. Ultra intelligence depicted an exploitable situation at Anzio that was similar to several combat situations in North Africa. This means specifically that Ultra can complement other sources of intelligence information by depicting in a clear and vulnerable area suitable for an Allied attack. However, if sufficient Allied force and sustainability are not available to take advantage of this opportunity, intelligence collectors should not be faulted, nor should the leaders, such as General Clark who needed more forces and resources to exploit a temporary advantage. Nevertheless, this oversight occurs frequently in historical writing and blame for not appreciating Ultra is affixed unjustifiably to the leadership.

6. In the case of Anzio, there were many factors that need to be understood in conjunction with Ultra. For example, national level military leaders were not in complete agreement about military strategy toward Italy. The disagreement influenced the allocation of limited resources, especially landing craft. General Clark was never entirely

confident that he would have sufficient landing craft to sustain a beachhead, much less support extensive combat operations directed at the Alban Hills and other areas deeper into central Italy.

7. Combined operations had a significant impact upon Operation Shingle also. Interpreting the Fifth Army and VI Corps mission was a problem. The British generals, Alexander and Penney, seemed to have a different idea of what should be accomplished at Anzio than the American generals, Clark and Lucas. Complicating this situation was the ill-feeling that developed between British and American officers, especially Penney and Lucas.

8. Finally, the Allies did not achieve complete surprise at Anzio with Operation Shingle, though some measure of tactical surprise occurred. Ultra revealed German awareness of an imminent Allied landing. The only unknown variables were timing and precise location. German contingency plans had been thus accordingly developed.

There are still many gaps in our understanding of Allied intelligence, specifically regarding Ultra, in preparation for and in executing Operation Shingle.

1. General Clark's SLU provided all Ultra intelligence information to the G-2 or his deputy. Then they decided whether to show the Ultra information to the Chief of Staff or General Clark. This was clearly not in accordance with Winston Churchill's procedural rules; but, more importantly, it leaves a degree of doubt whether General Clark always knew the total Ultra picture, as his G-2 did, or if General Clark knew that he was being provided Ultra intelligence information as opposed to the G-2 attributing the information to one of his more conventional intelligence sources. General Clark's oral biographical

history interviews certainly indicate that he received Ultra, but how much he saw cannot be determined.

2. It is difficult to determine how much Ultra intelligence information was sanitized or disseminated under cover of another source of intelligence. Certainly, General Lucas received some sanitized Ultra, but the origin as well as the quantity remains uncertain. It does not appear that General Alexander and General Clark had the authority to sanitize Ultra intelligence information. On the other hand, General Clark appears to have provided sanitized Ultra disclosures of a German counter-attack on 3 February to Lucas. Therefore, the procedures for sanitization as well as the quantity disseminated appear to have had some flexibility, although exactly how much remains unclear.

3. The relationship of Y signals intelligence to Ultra also remains a mystery. The American units that were responsible for Y signals intercept and dissemination are logical candidates for collecting at least some Ultra intelligence information too. However, though geographically capable and possessing the required equipment, no definite link has been established with such units as the 849th Signals Intelligence Service and Bletchley Park.

4. The nature of the beast, Ultra itself, is itself a serious gap to our understanding of Operation Shingle. The intercepted German messages were not always clear or, in fact, distinguishable to permit complete intercept and decryption. Consequently, many Ultra messages contained only parts of signals sent by or to Hitler. But it was also a problem experienced within the German military communications system. Still, we do not know if Ultra could have been more successful, even if all high level communications were successfully intercepted and

decyphered, or that the fact that some Ultra messages that were intercepted only in part portrayed a misleading set of circumstances to the Allies.

5. Ultra was employed successfully in operations prior to November 1943 but the British have not declassified or released these messages. Therefore, there is a gap in our knowledge of the precise Ultra intelligence information available prior to and during military operations at Sicily and Salerno. Thus far, only the accounts of Ultra provided by such authors as Lewin, Kahn, and Brown reveal contributions by Ultra to these battles. Naturally the contentions in these secondary sources remain undocumented.

Those students or writers researching Ultra's contribution to other battles of World War II may consider the following recommendations:

1. A basic or fundamental knowledge of the battle must be understood before consulting Ultra material. The reason is that Ultra was more successful during some periods than others. Consequently, all of the events surrounding a battle need to be examined before the significance of the Ultra messages can be understood. For example, an opportunity to exploit surprise must be understood in context with all other factors, such as military strategy, resources, and political considerations.

2. The development of the Enigma machine and the Allied ability to decypher German communications must be carefully analyzed for the timeframe of the battle. Allied capability to intercept, decypher, and disseminate Ultra improved during each year of World War II. Ultra's contributions subsequent to the invasion of Normandy should have been

far better than during operations in North Africa. Cryptanalysts became more proficient and the dissemination system developed efficiently. More importantly, Allied military leaders acquired more confidence in Ultra each year. Therefore, the usefulness of Ultra at the tactical level may be more apparent in 1945. Ultra must be examined in terms of its period of maturity.

3. Finally, a word of caution to the student who seeks the historical insight provided by German generals after World War II. Critical information explaining German intentions and problems is available from the interviews and writings of German commanders and staff officers; however, if one is not careful, a tendency to match Ultra messages to the German testimony can develop. The danger is that one or two Ultra messages may very well fit the German intentions but at the time to the Allies the information was insufficient to be credible, not entirely understood in the context hindsight now provides, or not received in time to be useful. Reconstructing our knowledge of operations in World War II with Ultra should be accomplished first, and then afterward compared with testimony from German sources.

#### Postscript

The question "Will Ultra rewrite history" is full of traps and, often, a clear cut yes or no answer is desired, if only for argumentative reasons. Even if the British release all Ultra related European Theater material, this issue will no doubt never be completely resolved. In the case of General Clark at Anzio, the times and events remain largely in need of little revision. However, the significant influence that Ultra had upon decisionmaking must be integrated into all

historical accounts of Anzio if a truly accurate perception of strategic as well as combat decisions during the Italian Campaign is to be fully understood. In that limited sense, Ultra will "rewrite" history. Still, Ultra should not be viewed narrow-mindedly. It was a decisive factor in many battles of World War II, such as Anzio, but it was only as good as the information from other conventional sources that weaved the whole picture and the use that commanders made of it. As demonstrated by General Clark, though, Ultra did not nor should not have undermined the military decisionmaking process. It was only one contributor. Other operational factors, such as troops, material, and transportation were likewise important. If lacking the necessary sustainability, it meant that ripe opportunities for defeating the Germans as portrayed by Ultra could not be exploited. This did not mean that Ultra was unappreciated or ignored by the commanders, just not exploitable for a specific time and situation - notwithstanding that chances of survivability depended upon it.

**APPENDIX A**

## REVIEW OF LITERATURE

This examination of literature will focus only on those sources that contributed to a knowledge of Ultra and an understanding of the critical events related to Anzio. Secondary sources of information will not be discussed, but only included in the bibliography.

### Section I

There are several comprehensive reviews of Ultra related books and articles available, such as Alexander S. Cochran's "'Magic', 'Ultra', and the Second World War" (See bibliography). These reviews examine the full spectrum of Ultra and Y-Service contributions to our understanding of World War II in Europe and the Pacific. It is not the intent of this review to reexamine all such works again. On the other hand, a few deserve special mention. Of course, F. W. Winterbotham's book, The Ultra Secret, was one of the first accounts of Ultra. It was written primarily from memory and Winterbotham's recollection of some specific events was not very accurate, writing some thirty years afterwards. Nevertheless, his book is an absolute starting point for any researcher involved with Ultra.

Ronald Lewin's book, Ultra Goes to War, was one of the best documented and useful Ultra-related publications. He attempts to cover Ultra's contributions throughout the entire World War II period. The few pages devoted to Anzio provided a good basis for further research. Ralph Bennett's book, Ultra in the West, primarily discusses the Normandy Invasion, however his appendices and discussion of Ultra messages are helpful in interpreting the Bletchley Park abbreviations or acronyms. Anthony Cave Brown's Bodyguard of Lies was published in 1975 and attempted to take what little Winterbotham recalled about events in World War II, to include Anzio, and compare that Ultra information with other historical accounts. Consequently, Brown does not provide much detail of Ultra's influence during the Anzio battle, but he does provide some interesting thoughts and footnotes for further research.

One of the most useful publications was Peter Calvocoressi's Top Secret Ultra. Calvocoressi was the Director of Air Intelligence in Hut 3 at Bletchley Park and therefore provides valuable insight into the processing and dissemination of Ultra material. Dr. Josef Garlinski explains the actual workings of the Enigma machine and how the Poles, later the Allies, finally broke the German code, in his book The Enigma War. The most recent Ultra-related book, The Hut Six Story, by Gordon Welchman, provides a good account of how Hut 6 at Bletchley Park broke the Enigma coding device. Welchman is one of the few writers that attempts to relate his experiences with Ultra during World War II to today's communications security situation. Ike's Spies: Eisenhower and the Espionage Establishment, by Stephen E. Ambrose is not completely

accurate with respect to Ultra, but he does provide some valuable insight into Ultra's relationship to the Italian Campaign. Although Aileen Clayton's The Enemy Is Listening, is not focused upon Ultra, she does offer an interesting account of signals intelligence (Y-Service primarily) at Anzio. Still, most of her work is oriented around Allied air intelligence efforts.

One very authoritative official history that gives the researcher a good basis for Ultra's contributions in North Africa is F. H. Hinsley's British Intelligence in the Second World War, Volumes 1 and 2. However, Hinsley's books are difficult to read and, in some places, understand. Nevertheless, the appendices are probably the most valuable part of his books. He worked at the Government Code and Cypher School at Bletchley Park and therefore possesses considerable knowledge of many topics that have never been explained before. One interesting example is Appendix 14, in Volume II, entitled "Technical Intelligence on Tanks and Anti-Tank Weapons in North Africa." The distinct absence of Ultra related messages during the Anzio timeframe strengthens suspicions that there is still more to be released by the British Public Records Office in London. But, Hinsley has nothing to offer on Anzio as it should be included in his next volume to be published soon.

Among the most informative and thought provoking articles published on Ultra are written by Dr. Harold C. Deutsch, a member of the faculty of the United States Army War College. His articles, "The Historical Impact of Revealing the Ultra Secret" and "The Influence of Ultra on World War II" provide the foundation for military historians to question accounts of many battles in World War II. Dr. Deutsch brings Ultra into context with strategy, enemy order of battle, and operational usefulness.

There are other current articles that discuss Ultra. Bennett's article, "Ultra and Some Command Decisions," in The Second World War edited by Walter Laqueur is particularly interesting and discusses Ultra messages; but makes some generalizations that are questionable and unsubstantiated in the recently released British Public Records Office Ultra files. Martin Blumenson also wrote an article, "Will Ultra Rewrite History?" that posed many questions which have been answered since its publication in 1978.

## Section II

The most valuable non-Ultra related documents that provided a good basis for an understanding of the personalities, events, and strategy at Anzio are by Martin Blumenson. His first book, Anzio: The Gamble that Failed, was published in 1963. Earlier (1960) he had written an article, "General Lucas at Anzio," as one of the chapters for Command Decisions edited by Kent Roberts Greenfield, but, it was not really intended to be a comprehensive account of Anzio. The second book about Anzio was published in 1969 and titled Salerno to Cassino, The Mediterranean Theater of Operations. Obviously this publication covered other battles in Italy and rightfully so as Salerno and Cassino were very relevant to Anzio. But the reader has to remember that

Blumenson's books were published before Winterbotham disclosed the secret of Ultra; therefore, changes and additional information are now available to supplement these books.

One very important book that is necessary to obtain a full appreciation of strategical considerations that influenced the Italian Campaign is Kent Roberts Greenfield's American Strategy in World War II: A Reconsideration. William G. F. Jackson's book, The Battle for Italy, and G. A. Shepperd's The Italian Campaign 1943-45, also provided insight into military strategy as well as discussed chronological developments that led to Anzio and occurred after VI Corps waded ashore. Henry Maitland Wilson's "Report by the Supreme Allied Commander Mediterranean to the Combined Chiefs of Staff on the Italian Campaign," was very useful researching the many problems that were experienced in planning Operation Shingle.

General Mark Clark's Calculated Risk and General Truscott's Command Decisions were crucial for understanding their impressions of developments that encompassed the preparation phase and landing at Anzio. Essentially these two books are their diaries or memoirs. The actual Lucas Diary obtained from the United States Army Military History Institute was similarly essential for gauging what thoughts or anxieties developed before, during, and after the Anzio landing. The interview of General Clark by Forest S. Rittgers, as part of the United States Army Oral History Program, was very significant. There are many episodes in this interview worthy of publication and pertinent to Ultra (though Clark only refers to the word 'intercept' instead of Ultra).

The World War II documents in the Combined Arms Research Library (CARL) have been very useful. Document No. N-16671-2, which was an untitled report representing the German view of the Italian Campaign, as compiled immediately after World War II was very informative. General Kesselring, his Chief of Staff, as well as at least one officer from every division or staff section were interviewed. In addition, the Fifth Army History and various VI Corps G-2 reports are also available in the CARL and collaborated information revealed by General Kesselring and his subordinates.

Documents such as Magna E. Bauer's "Shifting of German Units before and during Nettuno Landing and Effects of American Rapido Attack on 21 January on the Movement of German Reserves," from the National Archives provided important information on the movement of specific German units prior and after the Anzio landing. In addition, the recently declassified NSA documents, identified by 'SRH' number, are located in the National Archives and were very valuable. They provided insight into: the operations of Ultra, influence of Ultra in many battles of World War II, and, appreciation of Ultra by those who produced, controlled, and received this signal intelligence information. The VI Corps CPLAN, located in the historical archives of the United States Army Military History Institute at Carlisle Barracks was also indispensable.

### Section III

The most important part of the research for this thesis was devoted to the Ultra messages released by the British Public Records Office (PRO) in 1978. These Ultra messages represent an undetermined percentage of actual Ultra messages disseminated by Bletchley Park during World War II. Those still remaining within the restricted confines of the British PRO will hopefully be released soon for publication as well because these messages provide indisputable evidence of Ultra intelligence information as it existed in those critical war years.

The only difficulty with these Ultra messages is the long and laborious time required to sift through and study each message in the proper timeframe. Whoever performed the task of microfilming these messages, did so without any regard for chronology. For example, in microfilm reel 6, one will start with a given date/time group - such as 210018Z Jan 44. Then, the date/time groups will proceed chronologically down to 131532Z Jan 44. This is fine for one frame; however, there are a multitude of frames on each reel. Consequently, the next frame starts by showing messages beginning with a date/time group of 111231Z Feb 44 and proceeds to show messages chronologically to 210018Z Jan 44. This disrupts the train of thought and frustrates efforts to retrieve a certain message later on.

Understanding each message is also very difficult. As mentioned earlier, Ralph Bennett has assisted with this problem, as has Lewin and Garlinski. But even after all of the acronyms and abbreviations are understood, the messages themselves are not always written in narrative style and leave considerable latitude for interpretation. Notwithstanding these problems and frustrations, the PRO file is an essential source for anyone researching Ultra related topics.

**APPENDIX B**

CHRONOLOGY<sup>357</sup>

1943

- 14-23 Jan Casablanca Conference to plan Allied Strategy for 1943
- 31 Jan German surrender at Stalingrad
- 5 Apr Americans linkup with British Eighth Army in North Africa
- 3 May Eisenhower decides on plan for landing in Sicily
- 12-25 May Trident Conference in Washington to discuss Allied Strategy
- 11 Jun Allies switch air attacks to Axis airfields in Sicily
- 10 Jul Allies land in Sicily
- 17 Jul Eisenhower plans for alternatives to invasion of Italy
- 25 Jul Mussolini is replaced by Badoglio in Italy
- 26 Jul Combined Chiefs of Staff agree to Eisenhower planning amphibious attack at Salerno
- 8 Aug Kesselring orders evacuation of Sicily
- 11 Aug Germans start evacuation of Sicily
- 14 Aug Quebec Conference
- 15 Aug Eisenhower issues outline plan for invasion of Salerno
- 17 Aug German evacuation of Sicily completed
- 18 Aug-
  - 2 Sep Allied Air Forces bomb rail and road communications networks on the Italian mainland
  - 3 Sep Eighth Army crosses Straits of Messina
  - 5-6 Sep Salerno assault forces start convoy to beachhead
  - 9 Sep Fifth Army (10th and VI Corps) assault at Salerno 1st Airborne Division lands at Taranto
  - 12 Sep Critical situation in Salerno beachhead develops
  - 14 Sep Allied Air Forces fly maximum close air support at Salerno
  - 15 Sep Germans at Salerno turn to defensive
  - 16 Sep Kesselring orders phased withdrawal from Salerno
  - Fifth Army increases pressure to break out from bridgehead
- 12-13 Oct Fifth Army assault crossings over Volturno River
- 8 Nov Alexander orders Fifth Army to plan amphibious operation at Anzio
- 25 Nov Plans for amphibious landing at Anzio approved
- 28 Dec Date for Anzio landing decided as 22 January 1944
- 30 Dec Assault shipping begins to move to Mediterranean theater

1944

- 2 Jan Alexander gives target date for Anzio landing as between 20-31 January
- 12 Jan Alexander issues directive aiming at capture of Rome
- Orders issued for VI Corps landing at Anzio
- 21-22 Jan Kesselring launches strong counterattacks against 10th Corps threat to outflank southern sector
- 22 Jan VI Corps lands at Anzio at 0200

22 Jan Kesselring notified of Allied landings at Anzio at 0500  
Elements of 4th German Parachute Division arrive at Anzio beachhead by 1800  
23 Jan Elements of 3d Panzer Grenadier Division and 71st Division arrive at Anzio beachhead  
25 Jan German 14th Army headquarters established  
General Lucas starts limited attacks to enlarge bridgehead  
25-29 Jan No large scale fighting at Anzio  
30 Jan-  
    2 Feb VI Corps attacks to break out of bridgehead against steadily increasing German resistance  
    2 Feb General Clark orders bridgehead to prepare for imminent German counterattack  
    3-4 Feb Germans conduct first major counterattack against Anzio beachhead  
    5 Feb Germans halt counterattack and begin planning for another to commence on 16th of Feb  
    10 Feb General Lucas conducts conference with division commanders and orders seizure of Aprilia  
    12 Feb Attack to seize Aprilia fails  
16-18 Feb Operation Fischfang (2d major German counterattack)  
    19 Feb Hitler orders halt to counterattack  
    22 Feb General Lucas relieved  
28-29 Feb Third German counterattack fails  
    4 Mar Kesselring orders all German forces to revert to defensive  
    3 Jun Allies successfully break out of Anzio and take Rome

**APPENDIX C**

## GLOSSARY OF ACRONYMS AND TERMS

Bombes - a machine originated by the Poles. It consisted of six Enigma machines connected together and powered by an electrical current that worked out Enigma key settings.

Combined Chiefs of Staff (CCS) - the United States Chiefs of Staff and British Chiefs of Staff concurred on strategy and plans. When sitting together for such meetings, they were the CCS.

Cipher - method of secret writing that replaces each character or figure of the original with a different letter.

Cryptanalysis - technique of deciphering or decoding secret messages without access to the code.

D/F - represents direction finding.

Enigma - German ciphering machine.

EEI - Essential Elements of Information or key questions about what the enemy intends to do before and during a battle.

Fragmentary Order - This is one type of operation order. It contains information of immediate concern to subordinate units. Normally, they are issued after an operations order to change or modify that order.

M/T - represents motor transport vehicles.

OKW - represents Ober Kommando Wehrmacht or German High Command

Operation Avalanche - code name for invasion of Salerno.

Operation Baytown - code name for Eighth Army invasion across the Strait of Messina.

Operation Diadem - code name for final Allied break through of Gustav Line in May 1944.

Operation Husky - code name for invasion of Sicily.

Operation Overlord - code name for cross-Channel invasion of France.

Operation Richard or Case Richard - German contingency plan for an Allied amphibious invasion around Rome.

Operation Shingle - the code name for the Anzio amphibious landing.

Operation Slapstick - code name for British 1st Airborne Division invasion at Taranto.

Operation Webfoot - code name for the VI Corps rehearsal for Operation Shingle.

OPLAN - An operations plan covers a single operation or a series of connected military operations to be carried out simultaneously or in succession. Often it lists assumptions for implementation of the plan. When the time or conditions occur, for the plan to be in effect, the plan becomes an operation order.

SCU - Special Communications Unit which is colocated with the SLU. The SCU provides the SLU communications support.

SLU - Special Liaison Unit or the section responsible for handling, distributing, and ensuring security of Ultra messages transmitted from Bletchley Park.

Ultra - code name for intelligence information derived from intercepting German high level wireless radio communications and deciphering the intercepts with Bombe

W/T - represents wireless traffic.

Y-Service - represents intercepting low or medium level German wireless radio communications which were not normally encoded communications requiring analysis at Bletchley Park. The Y-Service was also involved with radio direction finding.

**APPENDIX D**

## Y-SERVICE

There were two types of wireless radio communications collected by the Allies during World War II. Many publications distinguish between them by referring to Ultra-related or high frequency communications as "U" and that derived from scanning the low and medium frequency ranges as "Y." Both types were signals intelligence information or "Sigint." But what was Y and how did it interface with U?

Calvocoressi explained that the main purpose of Y was "plucking messages out of the air."<sup>358</sup> For example, during the Salerno battle, most intercepted traffic was German plain language text while some messages were encrypted. Even these encrypted messages, however, were not as sophisticated as Enigma encoded messages. Sometimes decyphering these Y messages required special equipment, such as calculators, but much of the time it was a simple matter of breaking jargon or transposition codes.

The information collected by the Y service focused upon small unit strength, ammunition status reports, artillery and mortar fire reports, patrol activity, and the location of division, regimental, and battalion headquarters. At Anzio, for example, the Y service was so effective that it determined how many rounds had been expended and requisitioned by many German batteries as well as their current and alternate battery locations. Effective counterbattery fire by the Allies depended almost<sup>359</sup> exclusively upon the Y-service for the location of enemy batteries.

There was another equally important function performed by the Y service. It located the origin of German radio transmissions by taking an azimuth or bearing on the German radio transmitter from two or more Allied intercept stations. A German radio transmitter could be located accurately within 12 miles and quite often up to 30-50 miles away. This was called radio direction finding (D/F). The Y operators were also often able to identify the German radio operator based upon such characteristics as accents, intonations, or other vocal peculiarities, or idiosyncrasies in tapping out the morse (if it was nonverbal). Thus a network of German units could often be deduced and sometimes the entire subordinates of a German division could be determined.<sup>360</sup>

What were the problems and relationship of Y to U? First, as Calvocoressi explained, ". . . the air was full of noises and there was nothing to tell which wireless radio transmissions were German in origin, still less which among the German were Enigma" derived radio communications.<sup>361</sup> Although Calvocoressi does not address German diplomatic and navy encoded radio traffic, once an Allied radio intercept operator started listening to high frequency communications, it was difficult to distinguish between German army, navy, and other types of Enigma originated encrypted messages. Complicating the collection further, within the German communications spectrum, range frequencies

were not always clearly identifiable.<sup>362</sup> Radio transmissions wandered often from one frequency to another.<sup>363</sup> The stability of German radio nets was a significant problem for the Germans too.<sup>364</sup> They had considerable difficulty keeping them operational. The reasons varied from atmospheric to poor equipment. This wandering of frequencies created a confusing situation whereby U was sometimes collected on low or medium frequencies. The Y radio intercept operator was faced with the task of determining if a message appeared unusual and, if so, turning it over to the Bletchley Park analysts. Many messages required an educated guess based upon the type message, the frequency, and if known, the location of the transmitter.<sup>364</sup> Disseminating this type of information to Bletchley Park was routine as all German nets and callsigns were sent to Hut 6 to enhance the Enigma decryption effort. Exactly how such units in the field transmitted Y intercept information or suspected U intercepts to Bletchley Park has not yet been disclosed.

The importance of Y should be highlighted. Often there was no Ultra derived Sigint available and Y was the only timely intelligence information available to the commander. This was demonstrated in North Africa and Salerno. In North Africa, General Montgomery discovered the disposition and strength of General Rommel's forces at Alamein through Ultra; however, after the battle commenced, it was Y that analyzed the enemy situation and provided the timely information.<sup>365</sup> It took much longer for Ultra to be decyphered at Bletchley Park and be transmitted in time to influence many tactical situations during a battle. But, unlike Ultra, the Y service had one glaring weakness, specifically deception. German plain language text could lead Allied radio operators to hear false information, such as the false location of German units. The Germans knew that the Allies could listen to their conversations over the low and medium frequencies; therefore, an occasional false bit of information would be sufficient to either undermine the credibility of all Y Sigint or alter the tactical situation in their favor.

The security of Y Sigint was another problem. Although U Sigint demanded special security precautions, these procedures should not have undermined the security of Y Sigint. However, this seems to be what occurred, at least in North Africa. There are recorded instances in historical accounts of desert operations where an Allied radio operator was told to transmit in the clear to another Allied unit the imminent possibility of an attack. This information had been acquired by the Allies by decyphering a German message over the Y circuit and by revealing a knowledge of these German plans, alerted the German radio intercept operators of the Allied foreknowledge and led to cancelation of the attack. It would be unfair to blame all Allied communications security infractions upon the existence of Ultra; however, several historical accounts of Allied communications security during World War II refer to carelessness associated with Y Sigint after U Sigint became more widely disseminated and safeguarded. For example, Brigadier E. T. Williams explained in October, 1945 that ". . . before one became an Ultra reader one safeguarded Y to the top of one's bent." But, he continued, ". . . after Ultra indoctrination one's attitude towards security of Y became more slipshod" and "was discussed all too freely in the desert."<sup>366</sup>

In sum, it was the combined effect of U and Y Sigint on the battlefield that proved most successful. Still, prisoner of war reports, aerial photography, and other sources were needed to verify or further target Sigint derived information. Both types of Sigint were analyzed at Bletchley Park and the available evidence clearly indicates that some U was collected over the Y service circuits. Exactly how this impacts upon the mission of such units as the American 849th Signal Intelligence Service (SIS) Battalion has not been fully determined. However, the 849th SIS collected Y Sigint during the Salerno-Anzio battles and, no doubt, ~ e dealings with Ultra.

**APPENDIX E**

## 849TH SIGNAL INTELLIGENCE SERVICE<sup>367</sup>

1. Unit History: The 849th SIS was activated on 2 December 1942 at Fort Devens. It included one detachment in England. At least some of its assigned personnel were trained in England. Elements of the 849th SIS were sent to North Africa in March, 1943. Although detachments "A" and "E" were to go ashore in Sicily on D-day, Seventh Army headquarters held these detachments in North Africa until one week before the conclusion of the Sicilian campaign. Later elements of the 849th landed at Anzio and Normandy.

### 2. General Functions:

a. The basic mission of the 849th SIS on the day of activation was "to derive intelligence from enemy radio transmissions."

b. In North Africa, radio intercept and cryptanalysis of enemy low and medium level radio communications in a combat zone constituted an unexplored field for the United States Army.

c. Simple low-level jargon codes and cyphers were fairly easily broken by the 849th SIS cryptanalysts. International Business Machine equipment was used to break encoded radio traffic. Later, medium-level doubly-encyphered radio traffic was intercepted and decyphered by personnel trained somewhere in the London area. The only problem encountered was finding a suitable site to intercept this traffic.

d. The 849th SIS also had a small section that collected and studied captured enemy communications equipment.

### 3. Organization/Missions of Subordinate Units:

a. Detachment A supported 5th Army headquarters and the mission was twofold: support the G-2 with SIGINT derived from medium level intercepts, and secondly, research and study message traffic obtained at VI Corps.

b. Detachment B supported Allied Forces Headquarters by intercepting and analyzing radio traffic of German Army units in Southern France and Northwest Italy. This was accomplished from Corsica.

c. Detachment C was in North Africa in November 1943 and its whereabouts during the Anzio landing has not been determined. Its exact function is also a little vague, aside from working with the OSS.

d. Detachment D participated in the Allied landings at Anzio. Previously it intercepted German Air Force voice radio transmissions on Very High Frequencies. Although it operated on the USS Ancon

during the Salerno landings, it provided valuable information about Luftwaffe operations at that beachhead. At Anzio, Detachment D provided warnings of impending air attacks to the Allied ships in Anzio-Nettuno harbor.

e. Detachment E participated in the Anzio landing and continued to support VI Corps between fall 1943 and July 1944.

f. Detachment F remained in North Africa during the Anzio landing. It supported Headquarters, North African Allied Air Forces and trained personnel of other detachments and companies.

g. Detachment G, in November 1943, was split and moved to the 12th and 15th Air Force commands. Its primary mission was to de-cypher German radio transmissions broadcasting weather conditions so that Allied pilots would know weather conditions over enemy-held territory.

h. Detachment H operated at Headquarters, II Corps throughout its existence. Its mission was similar to Detachment E.

i. In addition to these detachments, there were the 117th, 122d, 123d and 128th Signal Radio Intercept Companies. These companies initially provided the intercept stations that would obtain the radio traffic for the detachments to analyze. Later, approximately at the time of the Anzio landing, elements of these companies were provided to the detachments (such as Detachment E) that were in combat zones.

#### 4. Important Considerations:

a. It was difficult convincing American tactical staffs who were skeptical of the value and accuracy of Sigint, of the importance of this type of intelligence information. Salerno was a key moment in this endeavor. The G-2 staffs finally became aware of its reliability but many unfortunate mistakes were made by tactical commands by disregarding Sigint before this new confidence was developed.

b. Lessons were learned with respect to Sigint information also. After successfully intercepting a German message postponing an attack in North Africa, an Allied tactical broadcast announced this postponement over the radio, in the clear, and it was intercepted by the Germans. Thus, the attack was again postponed and the Germans confirmed their suspicions that the Allies were intercepting their low or medium level communications.

c. Information obtained from prisoners of war proved valuable to field Sigint operations. Thus, all prisoner interrogation reports were eventually sent to the signal units.

d. The scoreboard on intercepting German units appeared as follows: First, mobile divisions provided nearly all of the readable traffic. They used radio communications, obviously more than the infantry divisions. Secondly, the 29th Panzer Division and 3 Panzer Grenadier Division were exceptions. The former was never intercepted

and the latter intercepted only four times in Italy. Third, the 90th Panzer Grenadier Division was the most regularly intercepted unit between September 1943 and September 1944. The parachute divisions were good contributors of intelligence traffic.

e. During the Anzio operations, approximately 450 enemy installations were located. A complete breakdown of 80% of the enemy artillery opposing the beachhead was determined by Sigint. The 147th Infantry Regiment was an example of many German units whose existence were unknown but had been identified as moving south of Rome on 31 January. Specific accounts of how Sigint saved lives and contributed to successful tactical operations by VI Corps at Anzio are also available. As a result the 849th received several letters of appreciation, commendation and unit citations for accomplishments at Anzio and Salerno.

5. Whether the 849th Signal Intelligence Service is finally proven to have had an association with Ultra or not, the commendations and related correspondence given to this American unit during World War II were significant. It was in the Mediterranean Theater of Operations that Sigint began to receive the notoriety among American military leaders and letters of appreciation were accordingly forthcoming. Copies of such commendations and letters are attached as enclosures to this appendix.

**APPENDIX F**

FIFTH ARMY'S SPECIAL LIAISON UNIT (SLU)<sup>368</sup>

Frederick W. Winterbotham, Prime Minister Churchill's Special Security Group Captain, periodically sent representatives to the field commander to determine if recipients properly adhered to the rules and procedures applicable to Ultra. There were two recorded visits to Fifth Army headquarters: the first, on 6 December 1943, by Captain F. B. Runnalls, and the second, on 13 July 1944, by Captain Loftus E. Becker. In other words, General Clark's SLU was visited at Caserta near Naples a month and a half before Operation Shingle II as well as a month after the Anzio breakout near Montepescoli. The recorded results of these visits might ordinarily provide an opportunity to compare organizational development of the SLU as well as usefulness and appreciation of Ultra intelligence information. However, the respective trip reports by Captains Runnalls and Becker provide only sketchy details. Nevertheless, some important observations and comparisons are still possible.

SLU - Caserta

The officer-in-charge of the SLU was Flight Lieutenant (Flt-Lt) Cook who was a British Royal Air Force officer. He had a good working relationship with the Fifth Army G-2. He was supported by three other officers (not further identified) and a Special Communications Unit (SCU) manned by four wireless radio operators and three driver/mechanics. SCUs were equipped with British Royal Air Force "hand speed morse facilities" which were responsible for the sending and receiving of Ultra messages within Allied communications channels. Thus, the SLU was generally more concerned with decyphering and disseminating as well as storing and destroying Ultra messages.

Actually Flt-Lt Cook was shorthanded because he did not want sergeants assigned to the SLU and there was an officer shortage. Therefore, a single officer performed encyphering/decyphering as well as delivery during each tour of duty or watch. Flt-Lt Cook's reasons for not wanting sergeants were not based upon a dislike for NCOs but concern that a sergeant would discover it more difficult to "refuse to deliver" an Ultra message to anyone other than those who were authorized. There are instances in Lewin's book, Ultra Goes to War, where this was a serious problem for other SLUs. In addition, Flt-Lt Cook believed that sergeants would find the temptation to answer questions about their job a little too great while living with the other Army sergeants.

Flt-Lt Cook's section was located in a truck that was adjacent and connected to the SCU truck. The wireless radio operator in the SCU truck received the Ultra message from Bletchley Park and passed it through a window to the SLU duty officer who decyphered the message. Then, the SLU duty officer delivered the decyphered Ultra message to either Colonel Howard, G-2, or Colonel Wells, Deputy G-2. If Colonel Howard or Colonel Wells decided to show the message to General Clark or

General Gruenthaler, they took it to them, not the SLU. Actually this was not in accordance with Churchill's instructions which specified that the SLU would take it directly to the senior commander or authorized individual and insure continuous control over the Ultra message. Nevertheless, this was the dissemination system at Fifth Army. Furthermore, Colonel Howard was permitted to keep the Ultra message in a locked safe in the G-2 truck separate from the G-2 tent. The G-2 truck was Colonel Howard's office. But he could only keep the Ultra message in the safe for 24 hours, then the SLU officer burned it. Colonel Howard and Colonel Wells were authorized to keep their own brief and cryptic notes from Ultra messages. These notes were placed in a small notebook and safeguarded in Colonel Howard's safe unless taken to General Clark or General Gruenthaler. All Ultra material taken to Colonel Howard and Colonel Wells was controlled by a receiving system.

There were only four individuals, aside from those working in the SLU and SCU, authorized to be aware of and read Ultra messages at Fifth Army. These individuals were:

General Clark, Commanding General  
General Gruenthaler, Chief of Staff  
Colonel Howard, G-2  
Colonel Wells, Deputy G-2

Actually, there was a fifth individual. He was a British officer, Brigadier Richardson, who was the British representative on General Clark's staff. He knew of Ultra primarily because of a previous assignment (not identified) and could therefore provide assistance on the interpretation of Ultra messages, as needed. However, he was not authorized Ultra messages by virtue of his staff assignment with Fifth Army.

It was difficult to conceal the mission of the SLU, as Lewin also mentions elsewhere in North Africa and the Mediterranean theater of operations. The SLU at Fifth Army was suspected by Fifth Army staff members who were not authorized Ultra as connected with the Y Service which was "uncomfortably close to home." This raises an interesting question - why were members of the RAF assigned to SLUs? Lewin mentions that the RAF had their own Code and Cipher School at Oxford, and it was RAF communications equipment used to receive and transmit Ultra from Bletchley Park directly to Fifth Army. However, Winterbotham, Lewin, and other writers do not specifically indicate that these were the reasons for RAF officers being assigned to Allied army units. In any event, the presence of RAF officers in a truck beside the G-2 tent provoked curiosity that may have added to difficulties concealing the mission of SLUs.

Although there does not appear to be a written directive concerning sanitization or 'cover' for Ultra intelligence information, Captain Runnalls' Trip Report indicates that Allied Forces Headquarters was seemingly authorized to perform this job. Thus, depending upon the plausible non-Ultra intelligence or collateral sources available, analysts at Allied Forces Headquarters would disseminate Ultra intelligence information under the pretext that photographic reconnaissance, prisoner of war interrogations, or front line spot reports were the originators. This permitted further dissemination down

to division, regiment, and battalion level where Ultra was not permitted.

SLU - Near Montepescoli, North of Orbetello

The Trip Report by Captain Becker revealed much procedural information consistent with Captain Runnalls' report. The following is additional information on the SLU supporting General Clark seven months later as well as a few changes.

The SLU consisted of these four officers: Flight Lieutenant Edwards (replacing Flt-Lt Cook), Flight Officers Spaulding and Bedford, and Lieutenant Reeves.

The following were eligible or indoctrinated for Ultra:

General Clark, Commanding General  
General Gruenthaler, Chief of Staff  
Brigadier General Howard, G-2  
Brigadier General Brann, G-3  
Major Riggs, Deputy G-2 (replacing Colonel Wells)

General Howard was dissatisfied with the coverage or number of individuals eligible for Ultra. He would have preferred to at least had one other besides Major Riggs in the G-2 section who could read and assist with Ultra. It is interesting that Major Riggs' duties were described as follows:

1. Aide to the G-2: This position was designed to assist the G-2 in conferring with other high ranking officers at all times of the day.
2. Deputy G-2: This position allowed Major Riggs to be aware of all G-2 plans and operations, undoubtedly to insure that it was consistent with his knowledge of Ultra.
3. Order of Battle Specialist: This job required extensive study and knowledge of collateral information-reporting to evaluate German troop unit composition and dispositions. It proved to be too time consuming for the Deputy G-2. Therefore, it was delegated to other members of the staff.
4. Report Writer: This job was likewise too time consuming for the Deputy G-2 and, therefore, undoubtedly delegated to others.

In sum, the most significant change that occurred was the addition of the G-3 as authorized to read Ultra intelligence information. This was very significant and the specific impacts of this change cannot be verified, as there is no written record of instances where it assisted operational planning in the G-3 section. However, it at least elevated the Fifth Army G-3 to a position of equity with the 15th Army G-3 in terms of understanding all of the rationale for command decisions especially as influenced by Ultra.

**APPENDIX G**

## EXAMPLES OF ULTRA SIGNALS<sup>369</sup>

The purpose of this appendix is to provide a few examples of Ultra messages. Each message is typed in exactly the manner it appears on the microfilm. Some features that should be understood on each message are:

1. CX/MSS is a general reference number in the upper left corner of each message issued by Bletchley Park.
2. VL is the actual message number and used when referring to other messages.
3. Letter and numbers that appear in double brackets, such as SH 58, AG 87, etc. represent the addressee. Although a list identifying these letters could not be located, SH is known to be Supreme Headquarters Army Expeditionary Forces or SHAEF and AG corresponds to 21st Army Group.
4. The initials of those individuals who processed the message are in the bottom left corner.
5. The time of origin from Bletchley Park is in the bottom right hand corner.
6. Priority markings range from Z to ZZZZZ which is the highest priority. A message with ZZZZZ may not necessarily be the most crucial item of information so much as it was often the most perishable, such as weather reporting.
7. The term 'COMMENT' separates a summarized translation of a German signal or intercept in Hut 3. On many messages, a number such as KV 9177, appears and corresponds to a specific reference number for circulation within Hut 3 when the decrypt was processed.
8. The double brackets should not be a concern because they were used as a coding device and should therefore be disregarded.
9. The use of '&' is used to indicate repetition of a word. This technique was adopted to insure proper identification of names and locations as well as to highlight important words.

Some abbreviations that may need definition are:

- 'abteilung' which is a section or detachment,
- 'abwehr' which is the military intelligence staff section of the German General Staff,
- 'batterien' is a battery,
- 'flak' means antiaircraft,
- 'GAF' is German Air Force, and
- 'PG' corresponds to Panzer Grenadier.

ZZZZ

THREE PANZER GRENADIER DIVISION (ARMY GROUP RESERVE)  
HAD NOT & NOT YET BEEN PUT INTO THE LINE BY ONE SEVEN  
HOURS TWENTYFIRST. [[VLA 4548 & 4548 GW 8 & 8]]  
ITS BATTLE HEADQUARTERS WAS THEN AT GEORGE SEVEN TWO  
TWO SEVEN (COMMENT, JUST SOUTH OF ROCCASECCA &  
ROCCASECCA, TEN MILES NORTH WEST OF CASSINO & CASSINO)  
COMMENT. INTENTIONS OF TEN ARMY LATE TWENTIETH WERE  
TO BRING THIS DIVISION, THEN TEN ARMY RESERVE,  
FORWARD AND TO PREPARE IT FOR OPERATIONS PRINCIPALLY  
ON THE LINE CASSINO AND SOUTH THEREOF.

JOP/HYD/DC

230533Z/1/44

This message indicates that the 3d Panzer Grenadier Division was still in 10th Army reserve on 21 January and its headquarters was in Roccasecca, ten miles northwest of Cassino. On 20 January, 10th Army intended to commit this division south of Cassino, but as of 21 January no movement had occurred. This was one of the German units quickly dispatched to the Anzio beachhead.

REF: CX/MSS/T79/39 (ZTPGM/55134)

VL 5160 PK/MA/SB/00/SH/AG

MED: ZZ

WEST: ZZ

ORDER BY HITLER & HITLER TO CHIEFS OF THREE SERVICES  
IN ITALY & ITALY PROMULGATED TWENTHEIGHTH COLON BATTLE  
FOR ROME & ROME WOULD FLARE UP IN NEXT FEW DAYS, DECIDING  
DEFENCE OF CENTRAL ITALY & ITALY AND FATE TENTH ARMY.  
EVEN GREATER SIGNIFICANCE OF BATTLE WAS THAT INVASION  
OF EUROPE & EUROPE PLANNED FOR ONE NINE FOUR FOUR BEGAN  
WITH LANDING NEAR NETTUNO & NETTUNO. [[VL 5160 & 5160  
PK 5 & 5 MA 48 & 48 SB 37 & 37 OO 53 & 53 SH 34 & 34  
AG 10 & 10]] AT AS GREAT DISTANCE AS POSSIBLE FROM BASE  
IN ENGLAND & ENGLAND, WHERE MASS INVASION TROOPS  
STILL READY, STRONG GERMAN FORCES TO BE TIED DOWN AND  
EXHAUSTED, AND EXPERIENCE ACQUIRED FOR FUTURE  
OPERATIONS. COMMENT. REMAINDER OF ORDER NOT & NOT  
KNOWN HERE.

RNB

301935Z/1/44

In this message, Hitler notified his commanders that the Allies would resume the attack during the next few days to capture Rome. More importantly, he cautions them that the Anzio landing was actually the beginning of the invasion of Europe because the Allies intended to tie down German forces in Italy before attacking across the Channel from England.

REF. 322  
REF. 314(CX/MSS/T79/39)

VL 5309 IN TWO PARTS. PART ONE.

MED: ZZ

WEST: Z

[[VL 5309 & 5309 PK 44 & 44 MA 65 & 65 SB 52 & 52 OO 53 & 53 SH 50 AG 12]]

IN TWO PARTS. PART ONE %

REMAINDER OF HITLER & HITLER ORDER IN VL FIVE ONE SIX

NOUGHT RAN COLON SIGNIFICANCE OF BATTLE]] TO BE FOUGHT BY ONE

FOUR ARMY MUST BE MADE CLEAR TO EACH MAN. TACTICALLY

IMPORTANT AND CLEAR ORDERS NOT & NOT SUFFICIENT, EVERY OFFICER

AND MAN OF THE ARMY, AIR FORCE AND NAVY MUST BE IMBUED WITH

FANATICAL DETERMINATION TO EMERGE VICTORIOUS FROM THE FIGHT

AND TO CONTINUE TO UNFLAGGINGLY UNTIL LAST ENEMY DESTROYED OR

DRIVEN BACK INTO SEA. FIGHT MUST BE WAGED WITH HOLY HATRED

AGAINST ENEMY WHO WAS CONDUCTING A MERCILESS CAMPAIGN OF

EXTERMINATION AGAINST THE GERMAN PEOPLE, WHO CONSIDERED EVERY

MEANS TO THAT END JUSTIFIED AND WHO, WITHOUT ANY HIGHER ETHICAL

PURPOSE, HAD FOR ONLY OBJECT THE DESTRUCTION OF GERMANY &

GERMANY AND WITH IT OF EUROPEAN CIVILIZATION. THE FIGHT MUST

BE HARD AND MERCILESS, NOT & NOT ONLY AGAINST THE ALLIES, BUT

PCP/AHW/HB

011416Z/2/44

This message, continued on the next page, has been referred to in part, by many military leaders and, subsequently, many historical writers. Usually the part most quoted is that referring to driving the Allies back into the sea. When the British Public Record Office finally released this Ultra message, the origin of Hitler's comments became known. The military leaders referring to this phrase had simply been careful not to attribute it to Ultra.

2.

VL 5309 PART TWO  
AND FINAL.

MED: ZZ

WEST: Z

[[VL 5309 & 5309 PART TWO AND FINAL Z  
ALSO AGAINST EVERY OFFICE AND MAN WHO SHOULD FALTER IN THIS]]  
DECISIVE HOUR. THE ALLIES MUST BE MADE TO REALISE, AS THEY  
WERE MADE TO REALISE DURING THE FIGHTING IN SICILY & SICILY,  
ON THE RAPIDO & RAPIDO AND AT ORTONA & ORTONA, THAT THE  
GERMAN FIGHTING SPIRIT WAS UNBROKEN AND THAT THE GREAT  
INVASION OF ONE NINE FOUR FOUR WAS A VENTURE WHICH WOULD BE  
STIFLED IN THE BLOOD OF ANGLO-SAXON SOLDIERS.

POP/AHW/HB

011423Z/2/44

Noteworthy in this second part of the message is the last line which General Clark may have been referring to during Rittger's interview when he said that the Allies intercepted Hitler's messages and they were "blood curdling" things.

REF. CX/MSS/T83/7  
PARTS. PART ONE

VL 5449 IN SEVERAL

2222

[[VL 5449 & 5k449 PK 77 & 77 SB 69 & 69 ZU 15 & 15  
KQ 80 & 80 JY 37 & 37 GW 36 & 36 OO 40 & 40 IN SEVERAL  
PARTS, PART ONE &

KESSELRING & KESSELRING INTENTIONS TWENTYEIGHTH FOR  
COUNTERATTACK SOUTH OF ROME & ROME. PARA ONE. TIME]]  
OF COUNTER ATTACK AGAINST ALLIES LANDED SOUTH OF ROME  
& ROME DEPENDENT ON ARRIVAL OF REINFORCEMENTS BEING  
BROUGHT UP, NAMELY COLON SEVEN ONE FIVE INFANTRY  
DIVISION (WITH IMPROVISED MOTORISATION), REINFORCED  
PANZER GRENADIER REGIMENTS ONE NOUGHT TWO SEVEN AND  
ONE NOUGHT TWO EIGHT, ARTILLERY LEHRREGIMENT WITH  
SMOKE LEHRABTEILUNG, HOWITZER ABTEILUNG NINE NINE  
EIGHT, ROMAN ONE STROKE PANZER REGIMENT FOUR, ELEMENTS  
ONE ONE FOUR JAEGER & JAEGER DIVISION. ALSO DEPENDENT  
ON SUPPLY OF TWO AMMUNITION ISSUES TO ATTACKING UNITS.  
NECESSARY MOVEMENTS COULD NOT & NOT BE COMPLETED

PCP/RFB/KH

031421Z/2/44

This is the first part of the German counterattack plan to be launched against Allied forces on the Anzio beachhead initially on 28 January but postponed until early morning on 4 February. The other parts to this message continue on the next pages.

ZZZZ

[[VL 5449 &amp; 5449 PART TWO %

BEFORE THIRTYFIRST. ATTACK COULD THEREFORE BE PLANNED FOR FIRST AT EARLIEST. FOR THE GREATER PART OF THE]] MOVEMENTS INVOLVED SCHEDULED TO TAKE PLACE BY M/T & M/T AND ONLY PART BY RAIL. EVERY EFFORT WOULD BE MADE TO KEEP THIS DATE EVEN IF THERE WAS A FURTHER DETERIORATION IN RAIN TRANSPORT SITUATION. PARA TWO.

FOURTEEN ARMY (HQ & HQ CAPRANICA & CAPRANICA) RESPONSIBLE FOR COUNTER-ATTACK AND PROTECTION OF COASTAL AREA CECINA CECINA TO TIBER & TIBER MOUTH. ORDER OF BATTLE FOURTEEN ARMY AS FROM ELEVEN HOURS TWENTYEIGHTH TO BE COLON (ABLE) FIVE ONE MOUNTAIN CORPS (CORPS HQ & HQ AREA VITERBO & VITERBO) WITH REINFORCED GRENADIER REGIMENT NINE NINE TWO OF TWO SEVEN EIGHT INFANTRY DIVISION ON RIGHT, REINFORCED GRENADIER REGIMENT ONE NOUGHT TWO SIX IN CENTER (AREA GROSSETO & GROSSETO), THREE SIX TWO INFANTRY

PCP/RFB/KH

031425Z/2/44

Note in this portion of the above message that the headquarters locations of German units were listed.

ZZZZ

[[VL 5449 &amp; 5449 PART THREE %

DIVISION ON LEFT (AREA CIVITA VECCHIA & CIVITA VECCHIA).  
TASK COLON COAST]] PROTECTION CECINA & CECINA TO TIBER  
& TIBER MOUTH. (BAKER) ROMAN ONE PARACHUTE CORPS (HQ &  
HQ GROTTAFERRATA & GROTTAFERRATA) TO PREPARE ATTACK  
AGAINST ALLIES LANDED NEAR NETTUNO & NETTUNO WITH UNDER  
COMMAND COLON (ONE) SIX FIVE INFANTRY DIVISION (LESS  
GRENADIER REGIMENT ONE FOUR SIX, WITH UNDER ELEMENTS  
FOUR PARACHUTE DIVISION CAPABLE OF ATTACK AND GAF & GAF  
JAEGER & JAEGER BATTALION ZBV & ZBV SEVEN) ON RIGHT IN  
SQUARE TEN FROM NOUGHT FOUR TO EAST OF NOUGHT THREE. (TWO)  
GROUP GRAESER & GRAESER (MAIN ATTACK GROUP) WITH THREE  
PANZER GRENADIER DIVISION (LESS REINFORCED PG & PG  
REGIMENT EIGHT), PG & PG REGIMENT ONE NOUGHT FOUR (LESS  
ROMAN THREE), REINFORCED PG & PG LEHR REGIMENT ONE  
NOUGHT TWO SEVEN, AND, IN THE SECOND LINE, SEVEN ONE FIVE

PCB/RFB/KH

0314352/244

Note that the locations prior to attack are mentioned but without a German map, it is difficult to determine where these "squares" are located.

Z Z Z Z

[[VL 5449 &amp; 5449 PART FOUR %

INFANTRY DIVISION. AREA COLON SQUARE TEN, IN AREA SOUTH  
WEST, SOUTH AND]] NORTH WEST OF NOUGHT NINE. (THREE)  
SEVEN ONE INFANTRY DIVISION (LESS ONE AND ONE HALF  
REINFORCED REGIMENTS), WITH REINFORCED PG & PG LEHR  
REGIMENT ONE NOUGHT TWO EIGHT UNDER COMMAND, IN SQUARE TEN  
AREA TEN. (FOUR) TWO SIX PANZER DIVISION, REINFORCED  
BY ROMAN ONE STROKE PANZER REGIMENT FOUR AND TIGER &  
TIGER COMPANY MEYER & MEYER, CONCENTRATED BEHIND GRAESER  
& GRAESER AND SEVEN ONE DIVISION. (FIVE) PANZER DIVISION  
GOERING & GOERING (LESS MAIN BODY OF PANZER REGIMENT)  
REINFORCED BY SUGAR SUGAR PG & PG REGIMENT THREE FIVE,  
PARACHUTE REGIMENT ONE (TWO BATTALIONS) AND PANZER RECCE  
ABTREILUNG ONE TWO NINE, AREA COLON SQUARE TEN FROM FOUR  
KM & KM WEST OF SIXTEENTH THROUGH TWO TWO AS FAR AS FOURTEEN.  
PARA THREE, CONDUCT OF OPERATIONS. (ABLE) FROM

PCP/RFB/KH

031443Z/2/44

Z2ZZ

[[VL 5449 &amp; 5449 PART FIVE %

TWENTYEIGHTH CONTINUOUS ASSAULT TROOP UNDERTAKINGS ALONG WHOLE]] FRONT ROMAN ONE PARACHUTE CORPS TO OBTAIN CLEAR INFORMATION ABOUT GROUPING OF ALLIED FORCES AND MAIN POINTS OF CONCENTRATION. (BAKER) ALSO FROM TWENTYEIGHTH SYSTEMATIC SHELLING OF ALLIED ARTILLERY. FOR THIS PURPOSE HOWEVER, HAVING REGARD TO AMMUNITION SITUATION IN GENERAL, ONLY RESTRICTED QUANTITY AMMUNITION COULD BE MADE AVAILABLE. (CHARLIE) IN EARLY HOURS OF FIRST ATTACK ALONG WHOLE FRONT IN SQUARE TEN BETWEEN NOUGHT FOUR AND FOURTEEN, IN ORDER TO DISSIPATE ALLIED FIRE. MAIN ATTACK TO BE MADE BY GROUP GRAESER & GRAESER AND SEVEN ONE INFANTRY DIVISION. (WITH TWO SIX PANZER DIVISION ECHELONNED BEHIND) WITH RIGHT WING JUST WEST OF ROAD GENZANO & GENZANO - NETTUNO & NETTUNO ON ABOUT FIVE KM & KM FRONT, IN ORDER TO BREAK THROUGH ALLIED MAIN

PCP/RFB/KH

031450Z/2/44

ZZZZ

[[VL 5449 &amp; 5449 PART SIX %

DEFENCE ZONE IN DIRECTION NETTUNO & NETTUNO. FIRST  
OBJECTIVE COLON HEIGHTS NORTH OF NOUGHT SEVEN - ONE ONE.]]  
IT WOULD DEPEND ON SITUATION WHETHER, AFTER THIS OBJECTIVE  
HAD BEEN REACHED, A THRUST WOULD BE MADE THROUGH TO  
NETTUNO & NETTUNO, OR WHETHER GERMAN FORCES SHOULD SWING  
INTO ALLIED REAR TO SOUTHEAST OR WEST. IF A WEAK PLACE  
AT ANY OTHER POINT ON FRONT OF ROMAN ONE PARACHUTE CORPS  
SHOULD APPEAR, A FOLLOWING UP THRUST WOULD BE MADE THREE  
AFTER APPROPRIATE FORCES HAD BEEN SWITCHED. CONDUCT OF  
ATTACK WITH MAIN BODY EAST OF ROAD GENZANO & GENZANO -  
NETTUNO & NETTUNO ENFORCED BY NATURE OF GROUND, SINCE  
FORCES PROBABLY AVAILABLE TO SUPPORT THE ATTAACK COLON  
THREE NINE LIGHT BATTERIEN, THREE SIX MEDIUM BATTERIEN,  
NINE SMOKE BATTERIEN, ALSO THREE FOUR HEAVY, SEVEN

PCP/RFB/KH

031458Z/2/44

ZZZZ

[[VL 5449 &amp; 5449 PART SEVEN %

MEDIUM AND EIGHTEEN LIGHT FLAK BATTERIEN. PART OF]]  
FLAK WOULD BE FULLY INVOLVED IN AIR DEFENCE. (EASY)  
TASK OF GAF & GAF DURING NIGHTS BEFORE THE ATTACK  
COLON CONTINUATION OF ATTACKS ON SHIPPING IN NETTUNO  
& NETTUNO AREA. FROM NIGHT THIRTIETH - THIRTYFIRST  
HEAVY BOMBERS TO BE USED EXCLUSIVELY AGAINST NAVY SHIPS.  
ON DAY OF ATTACK MAIN TASK TO BE FIGHTER PROTECTION  
OVER GROUP GRAESER & GRAESER AND SEVEN ONE INFANTRY  
DIVISION AND FIGHTER BOMBER ATTACKS ON ALLIED BATTERIES.  
CONSIDERABLE REINFORCEMENT OF FIGHTER FORCES WAS  
NECESSARY. (FOX) GAF & GAF ATTACKS BY DAY ON ALLIED  
NAVAL FORCES PROMISED NO & NO DECISIVE SUCCESS OWING  
ALLIED AIR SUPERIORITY. AN ATTEMPT WOULD BE MADE TO  
ELIMINATE EFFECT OF MEDIUM AND HEAVY NAVAL GUNS  
BY HEAVY FLAT TRAJECTORY FIRE BY RAILWAY GUNS THEN

PCP/RFB/KH

031502Z/2/44

ZZZZ

[[VL 5449 &amp; 5449 PART EIGHT %

BEING BROUGHT UP, FOR THIS PURPOSE A SPECIAL ARTILLERY GROUP]] FOR ATTACKING SHIPS BEING FORMED COMPOSED OF RAILWAY ARTILLERY AND HEAVY FLAT TRAJECTORY FIRE. IF NEED AROSE GROUND ATTACK AIRCRAFT WOULD HAVE TO BE EMPLOYED IN ADDITION. ENGAGING OF ALLIED SHIPPING WITH HEAVY FLAT TRAJECTORY FIRE BEING CONTINUED AS HITHERTO. (GEORGE) TASK OF NAVY COLON TO ATTACK ALLIED SHIPPING BY SUBMARINE AND LAYING MINEFIELDS. (HOW) AS FAR AS COULD BE FORESEEN A DETERIORATION IN WEATHER TO BE EXPECTED END JANUARY AND BEGINNING FEBRUARY SO THAT ALLIED AIR SUPERIORITY MIGHT NOT & NOT THEN HAVE FULL EFFECT. (ITEM) SHOULD THE ALLIES ADVANCE TO LARGE SCALE ATTACK BEFORE FIRST, GERMAN & GERMAN COUNTER-ATTACK WOULD HAVE TO PROCEED FROM DEFENSIVE FIGHTING. PREPARATIONS FOR THIS EVENTUALITY ALSO BEING MADE. COMMENT, FIRSTLY, TARGET POINTS NOT & NOT

PCP/RFB/KH

031506Z/2/44

REF. CX/MSS/T83/7  
AND FINAL

VL 5449 PART NINE

ZZZZ

[[VL 5449 & 5449 PART NINE %  
AND FINAL.

IDENTIFIED. SECONDLY, AGREED WITH MIKE ITEM FOURTEEN,  
REFERENCE]] FOUR PANZER REGIMENT. (ABLE) POSSIBILITIES  
ARE COLON (ONE) PANZER REGIMENT OF THIRTEEN PANZER  
DIVISION. LAST DEFINITE IDENTIFICATION ON RUSSIAN  
FRONT FOURTEEN DECEMBER. (TWO) PANZER REGIMENT BEING  
FORMED FOR FOUR PARACHUTE DIVISION. PANZER UNITS ARE  
TO BE INCLUDED IN PARACHUTE DIVISIONS BUT WHOLE PANZER  
REGIMENT SEEMS UNLIKELY. (BAKER) SUGGEST FIRST  
POSSIBILITY MORE LIKELY BUT DOES NOT & NOT NECESSARILY  
IMPLY WHOLE OF THIRTEEN PANZER DIVISION BEING BROUGHT  
UP. (THIRDLY) SUGGEST SECTOR PREVIOUSLY SEVEN ONE DIVISION  
TAKEN OVER BY THREE SIX TWO ON TWENTYSEVENTH IN VL & VL  
FIVE THREE FOUR SEVEN (NOT TO ZU & ZU, KQ & KQ, JY & JY,  
CW & GW) WAS AREA CIVITA - VECCHIA & CIVITA - VECCHIA  
AND NOT & NOT OLD SEVEN ONE DIVISION SECTOR IN ISTRIA &  
ISTRIA AS IMPLIED IN COMMENT

PCP/RFB/KH

031515Z/2/44

REF. CX/MJS/T86/82  
IN TWO PARTS. PART ONE

VL 5677

Z

[[V1 5677 & 5677 PK 96 & 96 MA 10 & 10 BI 81 & 81 SB 54 & 54  
OO 73 & 73 IN TWO PARTS. PART ONE %

APPRECIATION BY CHARLIE IN CHARLIE SOUTH WEST (INTELLIGENCE)  
OF SECOND (COMMENT FIRST TWO]] PARAGRAPHS NOT AVAILABLE).  
PARA THREE CONCLUDED COLON ASSUMED THAT UNSPECIFIED W/T &  
W/T TRAFFIC WAS CONNECTED WITH CURRENT SUPPLY TRAFFIC>  
YOKE SERVICE DID NOT & NOT PICK UP MOVEMENT OF THE LANDING  
DIVISIONS TO PORTS OF EMBARKATION OR APPROACH BY SEA TO  
LANDING AREA, SINGLE WIRELESS SILENCE WAS MAINTAINED BY  
ALL FORMATIONS DURING THE ENTIRE MOVEMENT. FOR UNSPECIFIED  
REASONS CONNECTED WITH THIS WIRELESS SILENCE YOKE SERVICE  
COULD PRODUCE NO & NO RESULTS WHICH POINTED TO A LANDING.

PARA FOUR. THREE WERE NO & NO NAVAL RADAR & RADAR  
APPARATUSES ON THE WEST ITALIAN & ITALIAN COAST IN AREA SOUTH

PCP/HYD

070039Z/2/44

EVB

"CHARLIE IN CHARLIE SOUTH WEST" is the Commander-in-Chief or German forces in the Southwest (General Kesselring). It is difficult to understand the full meaning of this message because the first few paragraphs were not successfully intercepted. However, General Kesselring appears to be explaining why his headquarters did not recognize the Allies moving to the Anzio-Nettuno area.

Z

[[VL 5677 &amp; 5677 PART TWO AND FINAL %

OF PIOMBINO & PIOMBINO. ONE APPARATUS AT CIVITA VECCHIA  
& CIVITA VECCHIA WAS ONLY]] UNDER CONSTRUCTION, AND NOT &  
NOT SERVICEABLE AT TIME OF LANDING. GAF & GAF RADAR & RADAR  
APPARATUSES IN AREA FORMIA & FORMIA, TERRACINA & TERRACINA  
AND APRILIA & APRILIA DID NOT & NOT PICK UP APPROACH OF  
LANDING FLEET. PARA FIVE. TO SUM UP, THE ABSENCE OF  
GERMAN ABWEHR, LACK OF AIR AND SEA RECCE, FAILURE OF  
RADAR & RADAR, AND THE CONCEALMENT OF THE OPERATION  
WHICH WAS STRICTLY CARRIED OUT BY THE ALLIES PREVENTED  
A TIMELY RECOGNITION OF THE NETTUNO & NETTUNO LANDING  
OPERATION

070041Z/2/44

**NOTES**

NOTES

Chapter 1

1. F. W. Winterbotham, The Ultra Secret, (New York: Dell Publishing Company, 1974), pp. 15-22.
2. Alexander S. Cochran, Jr., "'Magic,' 'Ultra,' and the Second World War: Literature, Sources, and Outlook," Military Affairs, Vol. XLVI, No. 2, April 1982, p. 89.
3. Alexander S. Cochran, Jr., "The Influence of 'Magic' Intelligence on Allied Strategy in the Mediterranean," in New Aspects of Naval History, ed. Craig L. Symonds (Annapolis: Naval Institute Press, 1979), p. 340.
4. Ralph Bennett, "Ultra and Some Command Decisions," in The Second World War, ed. Walter Laqueur (London: Sage Publications, 1982), p. 219.
5. Martin Blumenson, "Will Ultra Rewrite History?" Army Magazine, August 1978, p. 194. Actually, Blumenson asked "In light of this (Ultra) one might ask, how come it took us so long to win the war?"
6. United States Military Academy, Operations in Sicily and Italy, (West Point, 1947), p. 68.
7. CBS, "60 Minutes," 3 August 1975. Morley Safer interviewed F. W. Winterbotham and General Mark W. Clark.
8. Ibid.
9. Ibid.
10. Ibid.
11. Ibid.
12. Ralph Bennett, Ultra in the West, (New York: Charles Scribner's Sons, 1979), p. xi.
13. Bennet, "Ultra and Some Command Decisions," p. 235.

Chapter 2

14. Ronald Lewin, Ultra Goes to War, (London: Hutchinson & Co., Ltd., 1978), p. 20.
15. Bennett, Ultra in the West, p. 2

16. "Breaking Enigma," After the Battle, No. 37, 15 February 1982, p. 2.
17. Lewin, p. 18.
18. Gordon Welchman, The Hut Six Story, (New York: McGraw-Hill Book Company, 1982), p. 20.
19. Ibid.
20. Ibid.
21. "Breaking Enigma," p. 2.
22. Josef Garlinski, The Enigma War, (New York: Charles Scribner's Sons, 1979), p. 25; and, Peter Calvocoressi, Top Secret Ultra, (New York: Random House, Inc., 1980), p. 86, refer to two-man German Enigma teams. However, Mr. Jerry Coates, Curator, National Cryptologic Collection, National Security Agency, Fort Meade, Maryland, stated on 17 April 1983 that the German military generally used three-man teams. Numerous photographs confirm this arrangement, but Mr. Coates added that some German units may not have had the luxury of assigning the third individual because of a shortage of personnel.
23. Welchman, pp. 37-51
24. Garlinski, p. 18.
25. Lewin, p. 19.
26. Welchman, p. 14.
27. Ibid, p. 51.
28. Calvocoressi, p. 53.
29. Welchman, p. 168.
30. Ibid, pp. 168-169.
31. Lewin, p. 122.
32. Calvocoressi, p. 52.
33. Garlinski, p. 25.
34. Welchman, pp. 53-54.
35. Calvocoressi, p. 41-43.
36. Ibid, p. 44.
37. Ibid, p. 49.

38. Ibid, p. 52.
39. Lewin, p. 53.
40. Ibid.
41. Edward C. Hitchcock, Book Review of the Hut Six Story, in "Foreign Intelligence Literary Scene." June 1982, p. 9.
42. Lewin, pp. 46-47.
43. Winterbotham, p. 64.
44. Lewin, p. 50.
45. Welchman, p. 139, does not specifically explain where Hut 11 was located. He insinuates that it was at Bletchley Park during the early days of 1943 but that it moved somewhere else in the London area.
46. Lewin, p. 124.
47. Ibid, p. 48.
48. Ibid.
49. Ibid, pp. 46-47.
50. Ibid.
51. Ibid, pp. 150-151.
52. Winterbotham, pp. 132-133.
53. Ibid, p. 134.
54. Ibid, p. 135.
55. Ibid.
56. Ibid.
57. Stephen E. Ambrose, Ike's Spies, (New York: Doubleday & Company, Inc., 1981), p. 73.
58. Winterbotham, pp. 112-113.
59. Lewin, pp. 170-171.
60. Ibid, p. 57.
61. Winterbotham, pp. 119-120.
62. Ibid.

63. Dr. Harold Deutsch, "The Influence of Ultra on World War II," an address to selected members of the Command and General Staff College on 18 January 1983.

64. Ambrose, p. 142.

65. Dr. Harold Deutsch, "The Influence of Ultra on World War II," in Parameters: Journal of the United States Army War College, Vol. VIII (December 1978), p. 6.

66. Winterbotham, p. 254.

67. Aileen Clayton, The Enemy Is Listening, (London: Hutchinson & Co., 1980), p. 18 refers to Y-Service as "responsible for monitoring all low or high grade cypher." Then, on p. 279 refers to the 849th SIS providing Y-Service to Salerno.

68. "Operational History of the 849th Signal Intelligence Service," Office of the Chief Signal Officer, Headquarters, Mediterranean Theater of Operations, United States Army, 27 July 1945, formerly classified Top Secret but declassified by the National Security Agency on 15 May 1981, p. 4. Hereafter, this document will be referred to as SRH 124 which is the numerical designation assigned by NSA.

69. Ibid.

### Chapter 3

70. Kent Roberts Greenfield, American Strategy in World War II: A Reconsideration, (Westport: Greenwood Press, 1963), p. 5.

71. Ibid, pp. 14-15.

72. Ibid, p. 13.

73. Winterbotham, p. 140.

74. Greenfield, pp. 17-18.

75. Ibid, p. 29. See also Joseph L. Strange, "The British Rejection of Operation Sledgehammer, An Alternative Motive," in Military Affairs, Vol. XLVI, No. 1, February, 1982, pp. 6-14.

76. Greenfield, pp. 31-32.

77. Ibid, pp. 33-34.

78. Ibid, p. 15.

79. Anthony Cave Brown Bodyguard of Lies (New York: Harper & Row, Publishers, 1975), p. 274.

80. Ibid.
81. Ibid.
82. Dan Kurzman, The Race for Rome, (New York: Doubleday & Co., Inc., 1975), p. 9.
83. Greenfield, p. 30.
84. Brown, pp. 323-324.
85. William G. F. Jackson, The Battle for Italy, (New York: Harper & Row, Publishers, 1967), p. 82.
86. Lewin, p. 336.
87. Ibid, p. 334.
88. Ibid, pp. 333-334.
89. Martin Blumenson, Salerno to Cassino, The Mediterranean Theater of Operations, (Washington, D.C.: Government Printing Office, 1969), p. 16.
90. Ambrose, p. 64.
91. Lewin, p. 280.
92. Ambrose, p. 64.
93. Winterbotham, p. 160.
94. Ambrose, p. 71.
95. Ibid.
96. Ibid, p. 71.
97. Brown, p. 328.
98. Ibid.
99. Lewin, p. 274.
100. Blumenson, Salerno to Cassino, p. 17.
101. Ibid, pp. 16-17.
102. Ibid, p. 59.
103. Ibid, p. 58 and p. 65.
104. Michael Howard, The Mediterranean Strategy in the Second World War, (New York: Frederick A. Praeger, Inc., 1968), p. 42.

105. Blumenson, Salerno to Cassino, p. 60.
106. Ibid.
107. Ibid, p. 61.
108. Ibid, p. 63.
109. David Kahn, Hitler's Spies, (New York: MacMillan Publishing Co., 1978), p. 479.
110. Blumenson, Salerno to Cassino, p. 21.
111. Ibid, pp. 52-54.
112. Ibid, p. 9.
113. Ibid, p. 43.
114. Ibid, p. 25.
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117. Jackson, p. 110.
118. Clark, p. 188.
119. Ibid.
120. Clayton, p. 280.
121. Ambrose, p. 72.
122. Clark, p. 194.
123. Ibid, p. 184.
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125. Ibid, p. 186.
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127. E. J. O'Neill, "Memorandum from Headquarters VI Corps" to Commanding General VI Corps, dated 29 June 1944. This was a memorandum from Colonel O'Neill, the Corps G-4, to the VI Corps Commander who had requested information concerning the "mounting and functioning of Headquarters VI Corps in the Salerno landing." The memorandum is available at the U.S. Army Military History Institute, Carlisle Barracks, Pennsylvania, 17013.

128. Ibid.

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130. "Operations in Sicily and Italy," p. 33.

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133. Clark, p. 186.

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135. Kenneth Strong, Intelligence at the Top, (London: Cassell & Co., 1968), p. 120. As the situation became critical at the Salerno beachhead, heavy bombers were used for the first time in a direct support role and this accounts for the decisiveness of air support at Salerno.

136. Winterbotham, p. 112.

137. Ibid.

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139. Blumenson, Salerno to Cassino, p. 68.

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141. Winterbotham, pp. 163-164.

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145. The Simon and Schuster Encyclopedia of World War II, s.v. ed. Brigadier General S.L.A. Marshall (1978).

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148. Ibid.

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150. Kurzman, pp. 12-13.

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152. Lewin, p. 338.
153. Nigel Nicolson, Alex: The Life of Field Marshal Earl Alexander of Tunis, (London: Weidenfeld and Nicolson, 1973), p. 226.
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165. Ibid, pp. 62-72.
166. The Simon and Schuster Encyclopedia.
167. Truscott, unnumbered page inside front cover.
168. Wynford Vaughan-Thomas, Anzio, (New York: Holt, Rinehart and Winston, 1961), p. 33.
169. Jackson, p. 130.
170. Ibid.
171. Winterbotham, p. 165.
172. Kurzman, p. 10.
173. Clark, p. 250.
174. Jackson, pp. 130-131.

175. G. A. Shepperd, The Italian Campaign 1943-45, (New York: Frederick A. Praeger, 1968), p. 166.

176. Jackson, p. 137.

177. Truscott, p. 288.

178. Ultra Message VL 18, Date/Time Group (DTG) 182133Z November 1943, (New York: Clearwater Publishing Company, Inc.). The British Public Records Office released many formerly classified Ultra signals in 1978. The Clearwater Publishing Company published these signals in microfilm form between 1978 and 1979. A discussion of this development can be found in F. H. Hinsley, British Intelligence in the Second World War, Vol. 1, (London: Her Majesty's Stationery Office, 1979), pp. vii-x. All Ultra messages cited hereafter will include the VL number and DTG.

179. VL 107, DTG: 200908Z November 1943.

180. Ibid.

181. Ibid.

182. VL 144, DTG: 202336Z November 1943.

183. Jackson, pp. 147-151.

184. Ibid, pp. 155-156.

185. Trusucott, p. 291.

186. Ibid.

187. Clark, p. 187.

188. Ibid.

189. Truscott, p. 296.

190. Henry Maitland Wilson, "Report by the Supreme Allied Commander Mediterranean to the Combined Chiefs of Staff on the Italian Campaign," 8 January 1944 to 10 May 1944,) (Washington D.C.: Government Printing Office, 1946), p. 6.

191. VL 3937, DTG: 150111Z January 1944; and, VL 4302, DTG: 191904Z January 1944.

192. Blumenson, Salerno to Cassino, p. 353.

193. Clark, pp. 283-284.

194. Truscott, p. 547.

195. Vaughan-Thomas, p. 38. Clark is described as recognizing that "Anzio was being launched on borrowed time and that there was no room for maneuver in the tight schedule laid down: the LST's had to return without fail to England by the promised date."

196. Fred Sheehan, Anzio: Epic of Bravery, (Norman: University of Oklahoma Press, 1964), p. 24.

197. "Operation Shingle: Outline Plan," Headquarters Fifth Army, 12 January 1944 as contained in Appendix 5 to "Diary of Major General John P. Lucas", available at the United States Army Military History Institute, Carlisle Barracks, Pennsylvania, 17013. Hereafter, it will be referred to as Lucas Diary.

198. Clark, p. 286.

199. Ibid.

200. William Seymour, Yours to Reason Why, (New York: St. Martin's Press, 1982), p. 248.

201. Ibid.

202. Lucas Diary, p. 17.

203. Forest S. Rittgers, interview of General Mark Clark at Charleston, South Carolina, 27 October 1972, as part of the United States Army Oral History Program. This oral biography of General Clark is available at the United States Army Military History Institute, Carlisle Barracks, Pennsylvania, 17013, in manuscript format. Hereafter, this manuscript will be referred to as Clark Oral History. General Clark's anxiety concerning the Alban Hills is discussed on p. 90.

204. VL 3624, DTG: 101440Z January 1944.

205. Lucas Diary, p. 40.

206. Blumenson, Salerno to Cassino, p. 354.

207. Vaughan-Thomas, p. 39.

208. Bennett, "Ultra and Some Command Decisions," p. 223.

209. Vaughan-Thomas, p. 49. Sheehan, p. 29, even remarks that it would have been impossible for the Allied G-2's to have known that German units had been moved away from the Rome vicinity several days or even one day before D-Day.

210. Blumenson, Salerno to Cassino, pp. 353-354.

211. Winterbotham, p. 270.

212. Clark's Oral History, pp. 89-90.